

STIC Search Report

STIC Database

TO: Jill M Gray

Location: REM 10A64

Art Unit : 1774 April 13, 2005

Case Serial Number: 09/91348

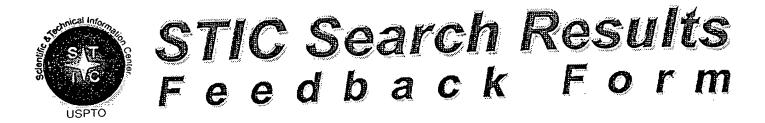
From: Usha Shrestha Location: EIC 1700 REMSEN 4B28

Phone: 571/272-3519

usha.shrestha@uspto.gov

Search Notes		
	·	





EIC17000

Questions about the scope or the results of the search? Contact the EIC searcher or contact:

Kathleen Fuller, EIC 1700 Team Leader 571/272-2505 REMSEN 4B28

Vo	luntary Results Feedback Form
A A	I am an examiner in Workgroup: Example: 1713 Relevant prior art found , search results used as follows:
	102 rejection
	103 rejection
	Cited as being of interest.
	Helped examiner better understand the invention.
	Helped examiner better understand the state of the art in their technology.
	Types of relevant prior art found:
	☐ Foreign Patent(s)
	 Non-Patent Literature (journal articles, conference proceedings, new product announcements etc.)
>	> Relevant prior art not found:
	Results verified the lack of relevant prior art (helped determine patentability).
	Results were not useful in determining patentability or understanding the invention.
C	Comments:

Access DB# 14950

SEARCH REQUEST FORM

Scientific and Technical Information Center

•	/	
Requester's Full Name: 1/11	GEAN.	Examiner # : 66953 Date:
Requester's Full Name:(Art Unit: _/7 / (Phone i	Number 30 7-15	Serial Number: <u>09/9/3 448</u>
Mail Box and Bldg/Room Location	n: <u>Rem 10 # 64</u> I	Results Format Preferred (circle): PAPER DISK E-MAIL
If more than one search is subm	nitted, please prio	oritize searches in order of need.

Include the elected species or structures, l	keywords, synonyms, a that may have a specia	cribe as specifically as possible the subject matter to be searched. acronyms, and registry numbers, and combine with the concept or al meaning. Give examples or relevant citations, authors, etc, if a, and abstract.
Title of Invention: Fiher with	improved Crim	Heretien Qualities and Cotion Exchange Properties
Inventors (please provide full names): [DeHrowski, Al	laiek; Morcellet, Mighel : Nark/Brinard
<u> </u>	<i>y</i>	,
Earliest Priority Filing Date:	15/99	
	de all pertinent informat	tion (parent, child, divisional, or issued patent numbers) along with the
appropriate serial number.		0 (- '
Pk Search 6	affached	Claims.
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STAFF USE ONLY	Type of Search	Vendors and cost where applicable
earcher: USLa	NA Sequence (#)	
earcher Phone #:	AA Sequence (#)	
earcher Location:	Structure (#)	Questel/Orbit
Date Searcher Picked Up: 4/13/05	Bibliographic	Dr.Link
Date Completed: 4 13 05	Litigation	Lexis/Nexis
earcher Prep & Review Time:60	Fulltext <u></u>	Sequence Systems
Clerical Prep Time:30 .	Patent Family	
Online Time: 241)	Other	Other (specify)

PTO-1590 (8-01)

Application No. 09/913,448
Filed: August 14, 2001
TC Art Unit: 1774
Confirmation No.: 9630

AMENDMENT TO THE CLAIMS

- 1. (Canceled)
- 2. (Canceled)
- (Canceled)
- 4. (Previously Presented) A process according to claim 11, wherein the poly(carboxylic) acid and poly(carboxylic) acid anhydride are selected from the group consisting of saturated and unsaturated acyclic poly(carboxylic) acids, saturated and unsaturated cyclic poly(carboxylic) acids, aromatic poly(carboxylic) acids, hydroxy poly(carboxylic) acids, citric acid, poly(acrylic) acid, poly (methacrylic) acid, 1,2,3,4-butanetetracarboxylic acid, maleic acid, aconitic acid, all-cis-1,2,3,4-cyclopentanetetracarboxylic acid, mellitic acid, oxydisuccinic acid, and thiodisuccinic acid.
- 5. (Previously Presented) A process according to claim 13, wherein the catalyst is selected from the group consisting of dihydrogen phosphates, hydrogen phosphates, hypophosphites, alkali metal phosphites, alkali metal salts of polyphosphoric acids, carbonates, bicarbonates, acetates, borates, alkali metal hydroxides, aliphatic amines and ammonia.
- 6. (Previously Presented) A process according to claim 11, wherein the cyclodextrin is selected from the group consisting of α -cyclodextrin, β -cyclodextrin and γ -cyclodextrin and wherein the cyclodextrin derivatives are selected from hydroxypropyl, methyl

Application No. 09/913,448
Filed: August 14, 2001
TC Art Unit: 1774
Confirmation No.: 9630

or acetyl derivatives of α -cyclodextrin, β -cyclodextrin and γ -cyclodextrin and inclusion complexes formed from said cyclodextrins or said cyclodextrin derivatives.

- 7. (Canceled)
- 8. (Canceled)
- 9. (Canceled)
- 10. (Canceled)
- 11. (Currently Amended) A process for treating a fiber consisting of:
- a. impregnating said fiber with an aqueous solution of a mixture to form an impregnated fiber, said mixture comprising
- one or more materials from the group consisting of cyclodextrins, cyclodextrin derivatives, inclusion complexes of cyclodextrins, and inclusion complexes of cyclodextrin derivatives, and
- one or more materials selected from the group consisting of poly(carboxylic) acids and poly(carboxylic) acid anhydrides;
- b. drying said impregnated fiber at a temperature in the range of 40°C to 150°C to obtain a treated fiber;
- c. heating said treated fiber to a temperature between 150-220°C-;
 - d. washing said treated fiber with water; and
 - e. drying said treated fiber.

Application No. 09/913,448
Filed: August 14, 2001
TC Art Unit: 1774
Confirmation No.: 9630

- 12. (Previously Presented) The process of claim 11 wherein said fiber has been formed into a material selected from the group consisting of yarn, woven textile material, knitted textile material, non-woven textile material, paper, leather and wood fiber-based material.
- 13. (Previously Presented) The process of claim 11 wherein said mixture further comprises a catalyst.
- 14. (Canceled)
- 15. (Canceled)
- 16. (Canceled)
- 17. (Currently Amended) The process of claim 11 wherein said treated material is dried at a temperature between 90°C and 110°C.
- 18. (Canceled)
- 19. (Canceled)
- 20. (Canceled)

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			MAREK"/AU	
			E MORCELLET M?/AU	
L2		146	SEA ABB=ON PLU=ON "MORCELLET M"/AU OR "MORCELLET	
			MICHEL"/AU	
			E MARTEL B?/AU	
L3		56	SEA ABB=ON PLU=ON "MARTEL B"/AU OR "MARTEL	
_	ARD"/A			
^	, , , ,	'	U OR "MARTEL BERNARD"/AU	
L4		12	SEA ABB=ON PLU=ON L1 AND L2 AND L3	
L5			SEA ABB=ON PLU=ON L4 AND FIBER?	
L6			SEA ABB=ON PLU=ON L5 AND CATION(A) EXCHANGE?	
20		_	D SCAN TI	
			D SCAN	
			D SCAN L5 TI	
L7		5	SEA ABB=ON PLU=ON L5 AND CYCLODEXTRIN?	
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L8		1	SEA ABB=ON PLU=ON FR99-1967/AP	
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L35
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                             PLU=ON
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L36
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                             PLU=ON
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OR
                L20 OR L21 OR L22 OR L23 OR L24 OR L25 OR L26 OR L28
                OR L32
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L37
         144072 SEA ABB=ON
                             PLU=ON
                                     L34
L38
            546 SEA ABB=ON
                             PLU=ON
                                     L34/DP
L39
        3446807 SEA ABB=ON
                             PLU=ON
                                     ?PHOSPHATE? OR ?PHOSPHITE? OR
                ?PHOSPHORIC? OR ?CARBONATE? OR ACETATE? OR BORATE? OR
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?HYDROXIDE? OR ?AMINE? OR AMMONIA?
?HYDROXIDE? OR ?AMINE? OR AMMONIA?
L40 3456557 SEA ABB=ON PLU=ON L37 OR L38 OR L39
L41
        17648 SEA ABB=ON PLU=ON L35
L42
          1149 SEA ABB=ON PLU=ON L35/DP
L43
        28041 SEA ABB=ON PLU=ON ?CYCLODEXTRIN?
        28403 SEA ABB=ON PLU=ON L41 OR L42 OR L43
L44
L45
         5922 SEA ABB=ON PLU=ON L44 AND L40
L46
        101705 SEA ABB=ON PLU=ON L36
        2287 SEA ABB=ON PLU=ON L36/DP
L47\
      259297 SEA ABB=ON PLU=ON (DI OR TRI OR TETRA OR
POLY) (A) CARB
               OXYLIC? OR (CITRIC OR ?ACRYLIC OR MALEIC OR
CITRACONIC
              OR MELLITIC OR OXYDISUCCINIC OR
THIODISUCCINIC) (A) ACID?
        288393 SEA ABB=ON PLU=ON L46 OR L47 OR L48
L49
           451 SEA ABB=ON PLU=ON L45 AND L49
L50
L51
            1 SEA ABB=ON PLU=ON L50 AND L8
         68134 SEA ABB=ON PLU=ON L40(L)CAT?/RL
L52
             7 SEA ABB=ON PLU=ON L52 AND L44 AND L49
L53
L54
             1 SEA ABB=ON PLU=ON L8 AND L53
        147728 SEA ABB=ON PLU=ON L40 AND CAT?/RL
L55
            20 SEA ABB=ON PLU=ON L55 AND L44 AND L49
            20 SEA ABB=ON PLU=ON L56 OR L53
L57
L58
            3 SEA ABB=ON PLU=ON L57 AND (FABRIC? OR TEXTILE? OR
               CLOTH? OR KINTT? OR YARN? OR WEAV? OR WOVE? OR PAPER?
               OR LEATHER? OR FIBER? OR FIBRE?)
            60 SEA ABB=ON PLU=ON L50 AND (FABRIC? OR TEXTILE? OR
               CLOTH? OR KINTT? OR YARN? OR WEAV? OR WOVE? OR PAPER?
               OR LEATHER? OR FIBER? OR FIBRE?)
          15 SEA ABB=ON PLU=ON L59 AND CAT?
L60
L61
           13 SEA ABB=ON PLU=ON L60 NOT (BILE? OR NUCLEIC?)
L62
           14 SEA ABB=ON PLU=ON L58 OR L61
               D QUE L62
         935 SEA ABB=ON PLU=ON L44 AND L49
L63
           44 SEA ABB=ON PLU=ON L63 AND CATALYST?
L64
           6 SEA ABB=ON PLU=ON L64 AND TEXTILE?/SC,SX
L65
L66
            1 SEA ABB=ON PLU=ON L64 AND PAPER?/SC,SX
L67
            6 SEA ABB=ON PLU=ON L65 OR L66
L68
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               D SCAN L67 TI
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FILE 'WTEXTILES' ENTERED AT 11:54:52 ON 13 APR 2005 L69 7434 SEA ABB=ON PLU=ON (BIHYDROGEN OR HYDROGEN) (A) PHOSPHAT

E? OR HYPOPHOSPHITE? OR ALKALI (3A) PHOSPHORIC? OR

BICARBONATE? OR CARBONAT? OR ACETATE? OR BORATE? OR ALKALI (2A) HYDROXIDE? OR AMINE? OR AMMONIA? 1481 SEA ABB=ON PLU=ON (DI OR TRI OR TETRA OR POLY) (A) CARB OXYLIC? OR (CITRIC OR ACRYLIC OR METHACRYLIC OR MALEIC OR CITRACONIC OR MELLITIC OR OXYDISUCCINIC OR THIODISUC CINIC) (A) ACID? L71 46 SEA ABB=ON PLU=ON ALPHA(A)CYCLODEXTRIN? OR BETA (A) CYC LODEXTRIN? OR GAMMA (A) CYCLODEXTRIN? L72 107 SEA ABB=ON PLU=ON ALPHA(A)CYCLODEXTRIN? OR BETA (A) CYC LODEXTRIN? OR GAMMA (A) CYCLODEXTRIN? OR CYCLODEXTRIN? L73 1 SEA ABB=ON PLU=ON L69 AND L70 AND L72 3 SEA ABB=ON PLU=ON L72 AND L70 D SCAN 3 SEA ABB=ON PLU=ON L74 OR L73 L75 FILE 'TEXTILETECH' ENTERED AT 12:05:24 ON 13 APR 2005 L76 0 SEA ABB=ON PLU=ON L69 AND L70 AND L72 (ビブラ) 1070 SEA ABB=ON PLU=ON (DI OR TRI OR TETRA OR POLY) (A) CARB OXYLIC? OR (CITRIC OR ACRYLIC OR METHACRYLIC OR MALEIC OR CITRACONIC OR MELLITIC OR OXYDISUCCINIC OR THIODISUC CINIC) (A) ACID? 109 SEA ABB=ON PLU=ON ALPHA(A)CYCLODEXTRIN? OR £78) BETA (A) CYC LODEXTRIN? OR GAMMA (A) CYCLODEXTRIN? OR CYCLODEXTRIN? L79 1 SEA ABB=ON PLU=ON L77 AND L78 D SCAN FILE 'RAPRA' ENTERED AT 12:08:48 ON 13 APR 2005 L82 10527 SEA ABB=ON PLU=ON (DI OR TRI OR TETRA OR POLY) (A) CARB OXYLIC? OR (CITRIC OR ACRYLIC OR METHACRYLIC OR MALEIC

POLY) (A) CARB

OXYLIC? OR (CITRIC OR ACRYLIC OR METHACRYLIC OR MALEIC

OR CITRACONIC OR MELLITIC OR OXYDISUCCINIC OR THIODISUC

CINIC) (A) ACID?

L83 518 SEA ABB=ON PLU=ON ALPHA(A) CYCLODEXTRIN? OR BETA(A) CYC

LODEXTRIN? OR GAMMA(A) CYCLODEXTRIN? OR CYCLODEXTRIN?

19 SEA ABB=ON PLU=ON L82 AND L83

L85 L86 L87 POLY) (A) CARB MALEIC THIODISUC L88 BETA (A) CYC L89 L90 L91

D SCAN D TRIAL

D TRIAL 2-5

1 SEA ABB=ON PLU=ON L84 AND (FIBER? OR FIBRE? OR FABRIC? OR PAPER? OR LEATHER? OR KNITT? OR YARN? OR WEAV? OR WOVE?)

D TRIAL

2 SEA ABB=ON PLU=ON L84 AND CATALYST? D TRIAL 1-2

FILE 'APOLLIT' ENTERED AT 12:41:23 ON 13 APR 2005 25084 SEA ABB=ON PLU=ON (DI OR TRI OR TETRA OR

OXYLIC? OR (CITRIC OR ACRYLIC OR METHACRYLIC OR

OR CITRACONIC OR MELLITIC OR OXYDISUCCINIC OR

CINIC) (A) ACID?

798 SEA ABB=ON PLU=ON ALPHA(A)CYCLODEXTRIN? OR

LODEXTRIN? OR GAMMA (A) CYCLODEXTRIN? OR CYCLODEXTRIN?

58 SEA ABB=ON PLU=ON L87 AND L88

20 SEA ABB=ON PLU=ON L89 AND CATALYST?

2 SEA ABB=ON PLU=ON L90 AND (TEXTILE? OR FIBER? OR FIBRE? OR FABRIC? OR YARN? OR PAPER? OR LEATHER? OR WEAV?)

3 SEA ABB=ON PLU=ON L89 AND (TEXTILE? OR FIBER? OR FIBRE? OR FABRIC? OR YARN? OR PAPER? OR LEATHER? OR WEAV?)

3 SEA ABB=ON PLU=ON L91 OR L92 D SCAN

FILE 'WPIX' ENTERED AT 12:44:33 ON 13 APR 2005

103196 SEA ABB=ON PLU=ON (DI OR TRI OR TETRA OR

POLY) (A) CARB

OXYLIC? OR (CITRIC OR ACRYLIC OR METHACRYLIC OR

MALEIC

L96

L92

OR CITRACONIC OR MELLITIC OR OXYDISUCCINIC OR

THIODISUC

CINIC) (A) ACID?

L95 6155 SEA ABB=ON PLU=ON ALPHA(A)CYCLODEXTRIN? OR

BETA (A) CYC

LODEXTRIN? OR GAMMA (A) CYCLODEXTRIN? OR CYCLODEXTRIN?

368 SEA ABB=ON PLU=ON L94 AND L95

62 SEA ABB=ON PLU=ON L96 AND (TEXTILE? OR FIBER? OR FIBRE? OR FABRIC? OR YARN? OR PAPER? OR LEATHER? OR WEAV?)

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			E? OR HYPO	PHOSPHITE	? OR ALKALI(3A)PHOSPHORIC? OR	
			BICARBONAT	E? OR CAR	BONAT? OR ACETATE? OR BORATE?	OR
-	,		ALKALI (2A)	HYDROXIDE	? OR AMINE? OR AMMONIA?	,
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74,			FIBRE? OR	FABRIC? O	R YARN? OR PAPER? OR LEATHER?	OR
			WEAV?)			
			D SCAN			•
	L102	15	SEA ABB=ON	PLU=ON	L97 AND TREATMENT?	
	L103_	9	SEA ABB=ON	PLU=ON	L101 AND TREATMENT?	
×	(104ية،	15	SEA ABB=ON	PLU=ON	L102 OR L103	
- <i>y</i>			D SCAN TI			
			D SCAN			
	L105	3	SEA ABB=ON	PLU=ON	L104 AND CATALYST?	
		•	D SCAN		•	
	L106	4	SEA ABB=ON	PLU=ON	L98 OR L105	
	•	1	D SCAN			
	L107	3	SEA ABB=ON	PLU=ON	L106 NOT MEDICAL?	

FILE 'REGISTRY' ENTERED AT 13:11:16 ON 13 APR 2005

FILE HCAPLUS

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FILE WTEXTILES

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FILE COVERS 1970 TO DATE.

FILE TEXTILETECH

FILE LAST UPDATED: 12 SEP 2003 <20030912/UP>

FILE COVERS 1978 TO MAY 2003.

FILE RAPRA

FILE LAST UPDATED: 11 APR 2005 <20050411/UP>

FILE COVERS 1972 TO DATE

FILE APOLLIT

FILE LAST UPDATED: 7 APR 2005 <20050407/UP>

FILE COVERS 1973 TO DATE

FILE WPIX

FILE LAST UPDATED: 11 APR 2005 <20050411/UP>
MOST RECENT DERWENT UPDATE: 200523 <200523/DW>

DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

=> fil hcap

FILE 'HCAPLUS' ENTERED AT 13:12:47 ON 13 APR 2005
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=> d que 153 ·

L10	1	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	7558-80-7/RN
L11 ·	1	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	7664-41-7/RN
L12	1	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	7681-53-0/RN
L13	1	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	10039-32-4/RN
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L19	1	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	110-16-7/RN
L20	1	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	498-23-7/RN
L21	1	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	499-12-7/RN
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L23	1	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	1703-58-8/RN
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L28
L29
            1 SEA FILE=REGISTRY ABB=ON PLU=ON 12619-70-4/RN
1 SEA FILE=REGISTRY ABB=ON PLU=ON 17465-86-0/RN
L30
L31
             1 SEA FILE=REGISTRY ABB=ON PLU=ON 25087-26-7/RN
L32
             4 SEA FILE=REGISTRY ABB=ON PLU=ON L10 OR L11 OR L12
L34
OR
                L13
              4 SEA FILE=REGISTRY ABB=ON PLU=ON L27 OR L29 OR L30
L35
OR
                L31
             14 SEA FILE=REGISTRY ABB=ON PLU=ON L15 OR L16 OR L17
L36
OR
                L18 OR L19 OR L20 OR L21 OR L22 OR L23 OR L24 OR L25
                OR L26 OR L28 OR L32
L37
         144072 SEA FILE=HCAPLUS ABB=ON PLU=ON L34
            546 SEA FILE=HCAPLUS ABB=ON PLU=ON L34/DP
L38
        3446807 SEA FILE=HCAPLUS ABB=ON PLU=ON
                                                  ?PHOSPHATE?:OR
L39
                ?PHOSPHITE? OR ?PHOSPHORIC? OR ?CARBONATE? OR
ACETATE?
                OR BORATE? OR ?HYDROXIDE? OR ?AMINE? OR AMMONIA?
        3456557 SEA FILE=HCAPLUS ABB=ON PLU=ON L37 OR L38 OR L39
L40
          17648 SEA FILE=HCAPLUS ABB=ON PLU=ON L35
L41
L42
          1149 SEA FILE=HCAPLUS ABB=ON PLU=ON L35/DP
          28041 SEA FILE=HCAPLUS ABB=ON PLU=ON ?CYCLODEXTRIN?
L43
         28403 SEA FILE=HCAPLUS ABB=ON PLU=ON L41 OR L42 OR L43
L44
       101705 SEA FILE=HCAPLUS ABB=ON PLU=ON L36
L46
           2287 SEA FILE=HCAPLUS ABB=ON PLU=ON L36/DP
L47
L48
         259297 SEA FILE=HCAPLUS ABB=ON PLU=ON (DI OR TRI OR TETRA
                OR POLY) (A) CARBOXYLIC? OR (CITRIC OR ?ACRYLIC OR
                MALEIC OR CITRACONIC OR MELLITIC OR OXYDISUCCINIC OR
                THIODISUCCINIC) (A) ACID?
       288393 SEA FILE=HCAPLUS ABB=ON PLU=ON L46 OR L47 OR L48
L49
        68134 SEA FILE=HCAPLUS ABB=ON PLU=ON L40(L)CAT?/RL
L52
             7 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 AND L44 AND L49
L53
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=> fil wtextile.

FILE 'WTEXTILES' ENTERED AT 13:13:21 ON 13 APR 2005 COPYRIGHT (C) 2005 Elsevier Science B.V., Amsterdam. All rights reserved

=> d que 173

L69 7434 SEA FILE=WTEXTILES ABB=ON PLU=ON (BIHYDROGEN OR HYDROGEN) (A) PHOSPHATE? OR HYPOPHOSPHITE? OR ALKALI(3A) P

HOSPHORIC? OR BICARBONATE? OR CARBONAT? OR ACETATE?

OR

BORATE? OR ALKALI (2A) HYDROXIDE? OR AMINE? OR AMMONIA?

L70 1481 SEA FILE=WTEXTILES ABB=ON PLU=ON (DI OR TRI OR

TETRA

OR POLY) (A) CARBOXYLIC? OR (CITRIC OR ACRYLIC OR METHACRYLIC OR MALEIC OR CITRACONIC OR MELLITIC OR

OXYDISUCCINIC OR THIODISUCCINIC) (A) ACID?

L72 107 SEA FILE=WTEXTILES ABB=ON PLU=ON

ALPHA (A) CYCLODEXTRIN

? OR BETA(A)CYCLODEXTRIN? OR GAMMA(A)CYCLODEXTRIN? OR

CYCLODEXTRIN?

L73 1 SEA FILE=WTEXTILES ABB=ON PLU=ON L69 AND L70 AND

L72

=> fil textiletech

FILE 'TEXTILETECH' ENTERED AT 13:13:46 ON 13 APR 2005 COPYRIGHT (C) 2005 Inst. of Textile Technology

=> d que 179

L77 1

1070 SEA FILE=TEXTILETECH ABB=ON PLU=ON (DI OR TRI OR TETRA OR POLY) (A) CARBOXYLIC? OR (CITRIC OR ACRYLIC OR METHACRYLIC OR MALEIC OR CITRACONIC OR MELLITIC OR

OXYDISUCCINIC OR THIODISUCCINIC) (A) ACID?

L78:

109 SEA FILE=TEXTILETECH ABB=ON PLU=ON

ALPHA (A) CYCLODEXTR

IN? OR BETA (A) CYCLODEXTRIN? OR GAMMA (A) CYCLODEXTRIN?

OR CYCLODEXTRIN?

L79

1 SEA FILE=TEXTILETECH ABB=ON PLU=ON L77 AND L78

=> fil rapra

FILE 'RAPRA' ENTERED AT 13:14:06 ON 13 APR 2005 COPYRIGHT (C) 2005 RAPRA Technology Ltd.

=> d que 184

L82 10527 SEA FILE=RAPRA ABB=ON PLU=ON (DI OR TRI OR TETRA OR

POLY) (A) CARBOXYLIC? OR (CITRIC OR ACRYLIC OR

METHACRYLI

C OR MALEIC OR CITRACONIC OR MELLITIC OR

OXYDISUCCINIC

OR THIODISUCCINIC) (A) ACID?

L83 518 SEA FILE=RAPRA ABB=ON PLU=ON ALPHA (A) CYCLODEXTRIN?

OR BETA (A) CYCLODEXTRIN? OR GAMMA (A) CYCLODEXTRIN? OR

CYCLODEXTRIN?

L84 19 SEA FILE=RAPRA ABB=ON PLU=ON L82 AND L83

=> fil apollit

FILE 'APOLLIT' ENTERED AT 13:14:20 ON 13 APR 2005 COPYRIGHT (c) 2005 FIZ Karlsruhe

=> d que 189

L87 25084 SEA FILE=APOLLIT ABB=ON PLU=ON (DI OR TRI OR TETRA

OR POLY)(A)CARBOXYLIC? OR (CITRIC OR ACRYLIC OR METHACRYLIC OR MALEIC OR CITRACONIC OR MELLITIC OR

OXYDISUCCINIC OR THIODISUCCINIC) (A) ACID?

L88 798 SEA FILE=APOLLIT ABB=ON PLU=ON

ALPHA (A) CYCLODEXTRIN?

OR BETA (A) CYCLODEXTRIN? OR GAMMA (A) CYCLODEXTRIN? OR

CYCLODEXTRIN?

L89 58 SEA FILE=APOLLIT ABB=ON PLU=ON L87 AND L88

=> fil wpix

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=> d que 196

L94 103196 SEA FILE=WPIX ABB=ON PLU=ON (DI OR TRI OR TETRA OR

POLY) (A) CARBOXYLIC? OR (CITRIC OR ACRYLIC OR

METHACRYLI

C OR MALEIC OR CITRACONIC OR MELLITIC OR

OXYDISUCCINIC

OR THIODISUCCINIC) (A) ACID?

L95 6155 SEA FILE=WPIX ABB=ON PLU=ON ALPHA(A)CYCLODEXTRIN?

OR

BETA (A) CYCLODEXTRIN? OR GAMMA (A) CYCLODEXTRIN? OR

CYCLODEXTRIN?

L96 368 SEA FILE=WPIX ABB=ON PLU=ON L94 AND L95

=> dup rem 168 175 179 186 193 1107

FILE 'HCAPLUS' ENTERED AT 13:15:22 ON 13 APR 2005

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PROCESSING COMPLETED FOR L68
PROCESSING COMPLETED FOR L75
PROCESSING COMPLETED FOR L79

PROCESSING COMPLETED FOR L86 PROCESSING COMPLETED FOR L93

PROCESSING COMPLETED FOR L107

L110 23 DUP REM L68 L75 L79 L86 L93 L107 (5 DUPLICATES REMOVED)

=> d l110 1-23 ibib abs hitstr hitind

L110 ANSWER 1 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2005:172632 HCAPLUS

DOCUMENT NUMBER:

142:262998

TITLE:

Process for chemically bonding an

odor-encapsulating agent to textiles and

textiles formed by the process

INVENTOR(S):

Todd, Donald Eugene; Brown, David Alan

PATENT ASSIGNEE(S):

Dan River, Inc., USA

SOURCE:

U.S., 9 pp.

CODEN: USXXAM

DOCUMENT TYPE:

Patent English

LANGUAGE:

1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.
DATE			,	
V				
~ 6%				
	HG 6061F20	D1	00050001	110 0000 400400
$\cup X$	US 6861520	B1	20050301	US 2003-427428
$(\mathbf{\Lambda})$	• • •			
7 2003	*1			

0430 PRIORITY APPLN. INFO.:

US 2003-427428

2003

0430

AB A process for chemical bonding an odor-encapsulating agent to textiles includes the steps of: reacting a cyclodextrin with a crosslinking agent capable of forming ether bonds with the cyclodextrin and with the textile material, and curing the textile material treated with a mixture of the cyclodextrin and crosslinking agent. Preferably, the crosslinking agent is imidazolidone, which forms an ether bond with a hydroxyl group on the cyclodextrin and with a hydroxyl group. In textile materials containing cellulose, imidazolidone forms an ether bond with

a hydroxyl group on the cellulose. An active agent can be complexed with the **cyclodextrin** for release. Textiles formed by such a process can comprise an article of clothing adapted to trap odors emanating from a wearer.

IT 77-92-9, Citric Acid, uses

(process for chemical bonding odor-encapsulating agent to textiles

and textiles formed by process)

© RN 77-92-9 HCAPLUS

CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{CO}_2\text{H} \\ | \\ \text{HO}_2\text{C}-\text{CH}_2-\text{C}-\text{CH}_2-\text{CO}_2\text{H} \\ | \\ \text{OH} \end{array}$$

IT 7585-39-9, β - Cyclodextrin

10016-20-3, α - Cyclodextrin

12619-70-4D, Cyclodextrin, alkyl derivs.

17465-86-0, γ - Cyclodextrin

(process for chemical bonding odor-encapsulating agent to textiles

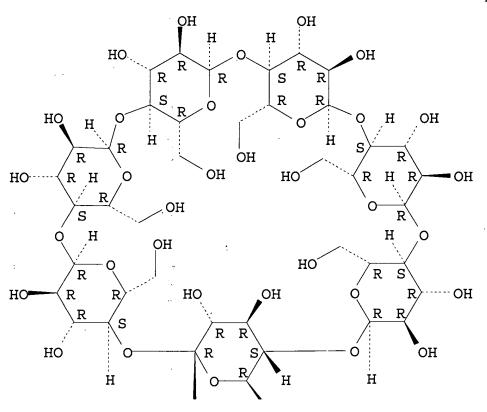
and textiles formed by process)

RN 7585-39-9 HCAPLUS

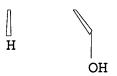
CN β-Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



RN 10016-20-3 HCAPLUS CN α -Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 12619-70-4 HCAPLUS

CN Cyclodextrin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 17465-86-0 HCAPLUS

CN γ -Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

IC ICM C08B037-08

ICS C08B013-00; C08B037-16

NCL 536103000; 536123000; 536020000; 536124000; 536066000; 536116000; 514338000; 424439000; 442083000; 008120000

CC 40-9 (**Textiles** and Fibers)
Section cross-reference(s): 44

chem bonding odor encapsulating agent textile cyclodextrin

IT 7786-30-3, Magnesium chloride., uses 204019-37-4,

Catalyst KR

ST

(process for chemical bonding odor-encapsulating agent to textiles

and textiles formed by process)

IT 64-19-7, Acetic acid, uses 77-92-9, Citric

Acid, uses 1854-26-8, Permafresh 113B 845787-50-0, Aldor 1465

(process for chemical bonding odor-encapsulating agent to textiles

and textiles formed by process)

IT 7585-39-9, β - Cyclodextrin

10016-20-3, α - Cyclodextrin

12619-70-4D, Cyclodextrin, alkyl derivs.

17465-86-0, γ- Cyclodextrin 107745-73-3,

```
O-2-Hydroxypropyl-\beta- cyclodextrin 477795-40-7,
      Cavasol W 7HP
                     845787-44-2, Cavasol W 7HP-TL9
         (process for chemical bonding odor-encapsulating agent to
 textiles
         and textiles formed by process)
 REFERENCE COUNT:
                          37
                                THERE ARE 37 CITED REFERENCES AVAILABLE
                                FOR THIS RECORD. ALL CITATIONS
 AVAILABLE
                                IN THE RE FORMAT
                      HCAPLUS COPYRIGHT 2005 ACS on STN
 L110 ANSWER 2 OF 23
 ACCESSION NUMBER:
                          2004:756753 HCAPLUS
 DOCUMENT NUMBER:
                          141:278321
 TITLE:
                          Preparation of starch-based polymer and its
                          application as sizing agent for paper
                          and paperboard
 INVENTOR(S):
                          Eiffler, Juergen; Fruehauf, Eva-Marie
 PATENT ASSIGNEE(S):
                          Dow Global Technologies Inc., USA
                          PCT Int. Appl., 29 pp.
 SOURCE:
                          CODEN: PIXXD2
 DOCUMENT TYPE:
                          Patent
 LANGUAGE:
                          English
 FAMILY ACC. NUM. COUNT:
 PATENT INFORMATION:
      PATENT NO.
                          KIND DATE
                                             APPLICATION NO.
 DATE
      WO 2004078807
                          A2
                                 20040916
                                          WO 2004-US2662
2004
 0130
      WO 2004078807 A3
                                 20050120
              AE, AE, AG, AL, AL, AM, AM, AT, AT, AU, AZ, AZ, BA,
              BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN,
              CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ,
              EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH,
              GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG,
              KG, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS,
              LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ,
              NA, NI
          RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW,
              AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,
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HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG,

P

BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

US 2003-450747P

2003

0228

AB A starch-based polymer is prepared from grafting 35-65 weight% ethylenically unsatd. monomer free of carboxyl groups, 35-65 weight%

ethylenically unsatd. mono-carboxylic acid or its salt and ethylenically unsatd. dicarboxylic acid or its salt, and 0-15 weight%

another ethylenically unsatd. copolymerizable monomer, on a starch

material selected from a natural starch, a dextrin, an acid-modified starch, a starch oxidized with a hypochlorite, an enzymtically modified starch, a starch acetate, a starch ether, a starch phosphate ester, or a cyanoethyl starch. A surface sizing agent for paper, paperboard, or cardboard comprising the above starch-based polymer is also provided. Thus, oxidized starch (Perfectamyl A 4692), styrene, and methacrylic acid were radically polymerized to obtain the graft copolymer.

IT 7585-39-9DP, β - Cyclodextrin, Me ethers, graft polymers with styrene, methacrylic acid and starch derivs.

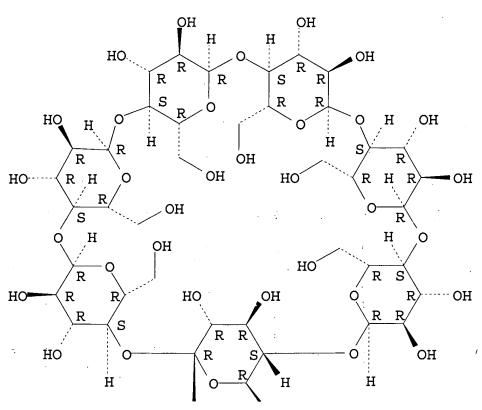
(preparation of starch-based polymer as sizing agent for paper and paperboard)

RN 7585-39-9 HCAPLUS

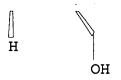
CN β -Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



- IC ICM C08F251-00
- ICS C08L051-02; C09D151-02; D21H017-28
- CC 37-3 (Plastics Manufacture and Processing)
 - Section cross-reference(s): 7, 43, 44
 starch styrene methacrylic acid graft
- ST starch styrene **methacrylic acid** graft copolymer sizing agent
- IT Polyesters, preparation
 - (acrylic; preparation of starch-based polymer as sizing agent

for paper and paperboard)

IT Paper

Paperboard

Sizes (agents)

(preparation of starch-based polymer as sizing agent for paper and paperboard)

IT 79-41-4D, Methacrylic acid, polymers with styrene and α -degraded oxidized starch/methylated cyclodextrins 100-42-5D, Styrene, polymers with methacrylic acid and α -degraded oxidized starch/methylated cyclodextrins 9000-90-2, α -Amylase

(preparation of starch-based polymer as sizing agent for paper and paperboard)

TT 7585-39-9DP, β- Cyclodextrin, Me ethers,
 graft polymers with styrene, methacrylic acid
 and starch derivs. 228421-41-8DP, Perfectamyl A 4692, degraded
 with α-amylase, polymers with styrene and
 methacrylic acid and methylated
 cyclodextrins 756898-71-2P 756898-72-3P 756898-73-4P
 757950-18-8P, Methacrylic acid-Nylgum A
 85-styrene graft copolymer 757955-81-0P
 (preparation of starch-based polymer as sizing agent for
 paper and paperboard)

L110 ANSWER 3 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:269843 HCAPLUS

DOCUMENT NUMBER:

140:289230

TITLE:

Fabric care compositions containing
UV protectant, dye sequestrant, fabric

softener etc

INVENTOR(S):

Adair, Matha J.; Finn, Leslie S.; Petrin, Michael J.; Rodriguez, Cheryl H.; Shanks, Philip C.; Van Buskirk, Gregory; De Leo,

Malcolm A.; Selbach, Hanneliese S.; Ochomogo,

Maria G.

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 30 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

. 1

PATENT INFORMATION:

D3.000	PA.	rent :	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		
DATE							-									
			-	07		7.1		0004	0401			000	0501	70		
	US	2004	0635	9,/		AI		2004	0401	1	US Z	002-	2591	79		
2002												•				
0927								7			•					
	WO	2004	0380	84		A 2		2004	0506	. 1	WO 2	003;-1	US30	521		
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								GM,							-	_
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								VN,								
	•	RW:						CZ,							GB,	GR,
					-	LU,	MC,	ΝL,	PT,	-	-	-	-		_	_
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2002

0927

AB A non-liquid, liquid, liquid-gel or gelled **fabric** care composition

comprises one or more fabric care enzymes effective for aiding in preventing pilling fuzzing, staining and other deterioration of fabric fibers during the wash process. The fabric care composition also comprises one or more UV protectants for brightening and preventing light caused photo fading or other damage to fabrics. The fabric care composition comprises one or more surface active dispersing, emulsifying and/or solubilizing agent principally comprised of surfactants, co-surfactants, hydrotropes and solvents

selected to solubilize or stabilize the composition The fabric care composition also comprises one or more dye-transfer inhibitors,

anti-redeposition agents or dye sequestrants to prevent re-deposition of dyes which have become transient from other fabrics. The fabric care composition comprises one or more dye, pigment and fabric color fixative or finish protectant to lock-in dyes and pigments to prevent their loss in quantity or quality during soaking or washing. The fabric care composition optionally comprises one or more textile lubricant and/or textile softening agent to coat the textiles and reduce inter-fiber and

fiber surface friction. The fabric care composition
also comprises one or more hardness and metal ion sequestrants

and

crystal growth inhibitors to bind free ions to prevent formation of insol. precipitate compds. The **fabric** care composition also comprises one or more chlorine and/or active oxygen scavengers or neutralizers which act to neutralize oxidizing agents, i.e.,

those

species with oxidation potential. The **fabric** care composition optionally comprises one or more from the following: handling, storage, processing agents to modify elastic and viscous phase properties, anti-foaming or frothing agents, anti-microbial, anti-bacterial or anti-fungal agents, pH buffer, adjustment and/or

modification, as needed, aesthetic dyes and/or fragrances.

IT 12619-70-4, Cyclodextrins

(dye-transfer inhibitor; **fabric** care compns. containing UV protectant, dye sequestrant, **fabric** softener etc)

RN 12619-70-4 HCAPLUS

CN Cyclodextrin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 77-92-9, Citric acid, uses

7408-18-6, Oxydisuccinic acid

(sequestrant; **fabric** care compns. containing UV protectant, dye sequestrant, **fabric** softener etc)

RN 77-92-9 HCAPLUS

CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy- (9CI) (CA INDEX NAME)

RN

7408-18-6 HCAPLUS

```
CN
     Butanedioic acid, 2,2'-oxybis- (9CI) (CA INDEX NAME)
      о- ch- ch2- co2 н
HO_2C-CH-CH_2-CO_2H
IC
     ICM C12S009-00
     510276000; 510392000
NCL
     46-5 (Surface Active Agents and Detergents)
CC-
    fabric care softener enzyme surfactant contg; UV
ST
     protectant dye transfer inhibitor fabric care compn;
     siloxane scavenger sequestrant fabric care compn
     Quaternary ammonium compounds, uses
IT
        ((2-hydroxypropyl) methylditallow alkyl, chlorides,
        cationic fabric softener; fabric
        care compns. containing UV protectant, dye sequestrant,
        fabric softener etc)
IT
     Polysiloxanes, uses
        (Et Me, textile lubricant; fabric care
        compns. containing UV protectant, dye sequestrant, fabric
        softener etc)
IT
     Polysiloxanes, uses
        (Me Ph vinyl, textile lubricant; fabric
        care compns. containing UV protectant, dye sequestrant,
        fabric softener etc)
IT
     Polysiloxanes, uses
        (Me Ph, textile lubricant; fabric care
        compns. containing UV protectant, dye sequestrant, fabric
        softener etc)
IT
     Polysiloxanes, uses
        (Me hydrogen, textile lubricant; fabric
        care compns. containing UV protectant, dye sequestrant,
        fabric softener etc)
IT
     Fluoropolymers, uses
        (Me trifluoropropyl polysiloxane-, textile lubricant;
        fabric care compns. containing UV protectant, dye
        sequestrant, fabric softener etc)
IT
     Polysiloxanes, uses
        (Me trifluoropropyl, textile lubricant;
        fabric care compns. containing UV protectant, dye
        sequestrant, fabric softener etc)
IT
     Polysiloxanes, uses
```

(Me vinyl, textile lubricant; fabric care compns. containing UV protectant, dye sequestrant, fabric softener etc)

IT Silsesquioxanes

(Ph, textile lubricant; fabric care compns. containing UV protectant, dye sequestrant, fabric softener etc)

IT Alcohols, uses

(alkoxylated, nonionic surfactant; **fabric** care compns. containing UV protectant, dye sequestrant, **fabric** softener etc)

IT Glycosides

(alkyl polyglycosides, nonionic surfactant; fabric care compns. containing UV protectant, dye sequestrant, fabric softener etc)

IT Betaines

Sulfobetaines

(alkyl, amphoteric surfactant; **fabric** care compns. containing UV protectant, dye sequestrant, **fabric** softener etc)

IT Betaines

(amidoalkyl, optionally alkyldialkyl, amphoteric surfactant;
fabric care compns. containing UV protectant, dye
sequestrant, fabric softener etc)

IT Alcohols, uses

(amino, scavenger; **fabric** care compns. containing UV protectant, dye sequestrant, **fabric** softener etc)

fabric softener etc)

Amides, uses
(coco, N-[(dimethylamino)propyl], betaine, amphoteric
surfactant; fabric care compns. containing UV protectant,
dye sequestrant, fabric softener etc)

IT Amides, uses

IT

(coco, N-[3-(dimethylamino)propyl], N-oxides, nonionic surfactant; **fabric** care compns. containing UV protectant, dye sequestrant, **fabric** softener etc)

IT Oligosaccharides, uses

(derivative, optionally alkoxylated, nonionic surfactant; fabric care compns. containing UV protectant, dye sequestrant, fabric softener etc)

IT Polysiloxanes, uses

(di-Et, textile lubricant; fabric care
compns. containing UV protectant, dye sequestrant, fabric
softener etc)

IT Polysiloxanes, uses
 (di-Me, textile lubricant; fabric care
 compns. containing UV protectant, dye sequestrant, fabric
 softener etc)

IT Polyamides, uses

Polyamines

(dye-transfer inhibitor; **fabric** care compns. containing UV protectant, dye sequestrant, **fabric** softener etc)

IT Amine oxides

(ethoxylated, propoxylated or alkylamidoalkylenedialkyl, nonionic surfactant; **fabric** care compns. containing UV protectant, dye sequestrant, **fabric** softener etc)

IT Fabric softeners

(fabric care compns. containing UV protectant, dye sequestrant, fabric softener etc)

IT Onium compounds

(imidazolium compds., cationic fabric softener; fabric care compns. containing UV protectant, dye sequestrant, fabric softener etc)

IT Resins

(natural, dye-transfer inhibitor; **fabric** care compns. containing UV protectant, dye sequestrant, **fabric** softener etc)

IT Polysiloxanes, uses

(nonionic surfactant, textile lubricant;

fabric care compas, containing IN protect

fabric care compns. containing UV protectant, dye
sequestrant, fabric softener etc)

IT Amine oxides

Glycosides

(nonionic surfactant; **fabric** care compns. containing UV protectant, dye sequestrant, **fabric** softener etc)

36118-45-3,

70356-09-1,

```
IT
     Polyamines
         (polyamide-, scavenger; fabric care compns. containing UV
        protectant, dye sequestrant, fabric softener etc)
IT
     Polyamides, uses
         (polyamine-, scavenger; fabric care compns.
        containing UV protectant, dye sequestrant, fabric
        softener etc)
IT
     Carboxylic acids, uses
         (polycarboxylic, dye-transfer inhibitor; fabric care
        compns. containing UV protectant, dye sequestrant, fabric
        softener etc)
IT
     Amine oxides
        (tertiary, nonionic surfactant; fabric care compns.
        containing UV protectant, dye sequestrant, fabric
        softener etc)
IT
    Silanes
        (textile lubricant; fabric care compns.
        containing UV protectant, dye sequestrant, fabric
        softener etc)
·IT
     Polysiloxanes, uses
        (vinyl silsesquioxane, textile lubricant;
        fabric care compns. containing UV protectant, dye
        sequestrant, fabric softener etc)
IT
     Silsesquioxanes
        (vinyl, textile lubricant; fabric care
        compns. containing UV protectant, dye sequestrant, fabric
        softener etc)
     118-60-5, Octyl salicylate 131-55-5, Benzophenone-2
IT
                                                             131-57-7,
     2-Hydroxy-4-methoxyphenyl phenyl methanone 134-09-8, Menthyl
     anthranilate 4065-45-6, Benzophenone-4 5466-77-3, Octyl
                        6197-30-4, 2-Ethylhexyl 2-cyano-3,3-diphenyl
     methoxycinnamate
     acrylate
               21245-02-3 27503-81-7, Phenylbenzimidazole sulfonic
     acid
            30776-58-0
                         36861-47-9
                                      71617-10-2, Isoamyl 4-methoxy
    cinnamate 76656-36-5, Benzophenone-9 103597-45-1
187393-00-6
     190085-41-7
        (UV absorbing material; fabric care compns. containing UV
        protectant, dye sequestrant, fabric softener etc)
IT
     51-17-2D, Benzimidazole, bis(2-yl) derivative
                                                    51-17-2D.
                                           59-31-4, 2-Quinolone
     Benzimidazole, conjugated derivative
91-64-5,
                120-46-7D, Dibenzoylmethane, derivative
     Coumarin
                                                          588-59-0D.
     Stilbene, derivative 888-92-6, 2-Styrylbenzoxazole
                                                            2039-68-1
                 4061-32-9, 4,4'-Distyryl biphenyl
                                                     4434-38-2,
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Stilbene naphthotriazole 14848-03-4 27344-41-8

4-tert-Butyl-4'-methoxy dibenzoylmethane 676162-42-8

Pyrazoline 49548-05-2D, derivative 54243-77-5

(UV protectant; fabric care compns. containing UV protectant, dye sequestrant, fabric softener etc) IT 29226-39-9, Diphenylsilanediol homopolymer Polydimethylsiloxane 49718-23-2, Hydrogenmethylsiloxane 56267-41-5, Diethylsilanediol homopolymer 155940-31-1, Ethyl methyl silanediol homopolymer 156395-51-6, 3,3,3-Trifluoropropylmethylsilanediol homopolymer 157141-20-3, Methylvinylsilanediol homopolymer 183867-45-0, Ethyl phenyl silanediol homopolymer 183867-47-2, Ethylvinylsilanediol homopolymer 676162-82-6, Phenylvinylsilanediol homopolymer (assumed monomers, textile lubricant; fabric care compns. containing UV protectant, dye sequestrant, fabric softener etc) IT107-64-2, Distearyl dimethylammonium chloride 7212-69-3, Dioleyl dimethylammonium chloride 92888-37-4, Methyl bis(oleylamidoethyl)2-hydroxyethyl ammonium methyl sulfate 676162-67-7, Dimyristyl diethyl ammonium bromide (cationic fabric softener; fabric care compns. containing UV protectant, dye sequestrant, fabric softener etc) IT 110-91-8D, Morpholine, ethosulfate salt (cationic surfactant; fabric care compns. containing UV protectant, dye sequestrant, fabric softener etc) IT9005-25-8, Starch, uses (cationic, dye-transfer inhibitor; fabric care compns. containing UV protectant, dye sequestrant, fabric softener etc) 273-53-0D, Benzoxazole, UV protectant IT (conjugated derivative; fabric care compns. containing UV protectant, dye sequestrant, fabric softener etc) IT 74191-29-0, Endoglucanase (derived from Humicola insolens; fabric care compns. containing UV protectant, dye sequestrant, fabric softener etc) 26913-06-4, Poly[imino(1,2-ethanediyl)] IT (dye-transfer inhibitor, scavenger; fabric care compns. containing UV protectant, dye sequestrant, fabric softener etc) IT 9000-30-0, Guar gum 9002-89-5, Polyvinyl alcohol 9002-98-6 9003-39-8D, Polyvinyl pyrrolidone, optionally derivative 9003-99-0, 9004-32-4, Carboxymethyl cellulose Peroxidase 9004-42-6, Carboxyethyl cellulose 9004-67-5, Methyl cellulose 9005-32-7, Alginic acid 9035-73-8, Oxidase 9045-81-2, Polyvinylpyridine-N-oxide 12619-70-4,

```
Cyclodextrins 25232-42-2, Polyvinyl imidazole
     25608-40-6, Polyaspartic acid 26062-48-6, Polyhistidine
     26063-13-8, Polyaspartic acid 26854-81-9, Polyhistidine
     106392-12-5, Ethylene oxide-propylene oxide block copolymer
     182482-80-0, Polyvinyl oxazolidone
        (dye-transfer inhibitor; fabric care compns. containing
        UV protectant, dye sequestrant, fabric softener etc)
     9000-92-4, Amylase
                         9001-92-7, Protease
                                               9012-54-8, Cellulase
     9013-79-0, Esterase
                          9027-41-2, Hydrolase
        (fabric care compns. containing UV protectant, dye
        sequestrant, fabric softener etc)
     111-20-6, Decanedioic acid, uses
                                      128-37-0, Butylated
    hydroxytoluene, uses 768-66-1D, 2,2,6,6-Tetramethylpiperidine,
     bis ester
        (fabric care compns. containing UV protectant, dye
        sequestrant, fabric softener etc)
   3676162-47-3D, salt 676162-52-0
                                       676162-57-5
        (finish protectant; fabric care compns. containing UV
        protectant, dye sequestrant, fabric softener etc)
    108-95-2D, Phenol, derivative, alkoxylated 1643-20-5, Lauryl
                  13840-40-9, Phosphine oxide
     amine oxide
                                                26912-60-7
        (nonionic surfactant; fabric care compns. containing UV
        protectant, dye sequestrant, fabric softener etc)
    71-00-1, Histidine, uses 74-79-3, Arginine, uses
     Tris(hydroxymethyl)aminomethane
                                      100-97-0, uses 111-42-2,
                           141-43-5, Monoethanolamine
     Diethanolamine, uses
     , uses 7772-98-7, Sodium thiosulfate
                                             9003-05-8
                                                         12125-02-9,
    Ammonium chloride, uses 24937-47-1, Polyarginine 25013-16-5,
    Butylated hydroxyanisole 25104-18-1, Polylysine
                                                        25212-18-4,
                   26336-38-9, Vinylamine homopolymer
     Polyarginine
     38000-06-5, Polylysine
        (scavenger; fabric care compns. containing UV protectant,
        dye sequestrant, fabric softener etc)
     77-92-9, Citric acid, uses
                                 93-62-9D,
     derivative
                 139-13-9, NTA
                                 150-39-0
                                            150-43-6, uses
869-52-3,
    Triethylenetetramine hexaacetate
                                       1429-50-1,
    Ethylenediamine tetrakis (methylene phosphonate)
    2809-21-4, Ethane 1-hydroxy-1,1-diphosphonic acid
    Ethylene diphosphonic acid 7408-18-6,
    Oxydisuccinic acid
                         13311-39-2,
                                      14047-41-7,
    Ethylenediamine tetrapropionate
    Diethylenetriaminepentaacetate 15827-60-8,
    Diethylenetriamine N, N, N', N'', N''-pentakis (methylene
    phosphonate) 28528-44-1, Nitrilotriacetate
                                                   29132-58-9,
    Acrylic acid-maleic acid
                34747-66-5 36465-90-4D, Diphosphonic acid,
    copolymer
derivative
```

IT

186459-75-6, **Ethylenediamine** N,N'-disuccinate

```
193207-51-1
        (sequestrant; fabric care compns. containing UV
       protectant, dye sequestrant, fabric softener etc)
IT
    541-02-6, Decamethylcyclopentasiloxane 556-67-2,
    Octamethylcyclotetrasiloxane 9004-73-3, Me hydrogen siloxane,
    SRU
          9005-12-3, Methylphenylsiloxane
                                            9016-00-6,
    Polydimethylsiloxane 25791-89-3
                                      28323-46-8,
    Methylvinylsiloxane
                          28323-47-9, Diethylsiloxane
                                                       28323-48-0.
    Phenylvinylsilanediol homopolymer, sru 28576-55-8,
    Poly[oxy(ethylmethylsilylene)] 31451-78-2 32129-24-1,
    Diphenylsiloxane 157374-41-9 183867-44-9,
    Ethylphenylsilanediol homopolymer, sru 183867-46-1,
    Ethylvinylsilanediol homopolymer, sru
                                           676162-58-6
        (textile lubricant; fabric care compns.
       containing UV protectant, dye sequestrant, fabric
       softener etc)
```

L110 ANSWER 4 OF 23 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN 2004-543302 [52] WPIX

ACCESSION NUMBER:

C2004-199328

DOC. NO. CPI: TITLE:

Polymeric compound useful as cleaning product

e.g. laundry detergent and fabric

conditioner comprises cationic monomer and hydrophobic unsaturated nonionic monomer.

DERWENT CLASS:

A12 A14 A97 D25

INVENTOR(S): PATENT ASSIGNEE(S): MAO, J; MENGE, U; ROHWER, H; SONG, Z (CIBA) CIBA SPECIALTY CHEM HOLDING INC

COUNTRY COUNT: 107

PATENT INFORMATION:

•	PATENT	NO			KII	ND I	OATI	Ξ.	Ţ	WEEI	K.		LA]	PG	•				
	WO 2004	4056	5888	3	A2	200	040	708	(2	004	52) ¹	* E1	.J	41	-					
	RW:	ΑT	BE	BG	BW	CH	CY	CZ	DE	DK	EA	EE	ES	FI	FR	GB	GH	GM	GR	HU
ΙE		тт	KE	T.C	T.IT	MC	MIM	Mσ	NTT.	\bigcirc _X	ייים	DΟ	מס	C E	СT	CV	CI.	C7	סידי	Т7
UG		11	KE	ЦЗ	ПÓ	MC	1,144	14125	ип	OA	FI	RO	ענ	36	51	ЫK	ъп	24	IK	14
		ZM																		
CZ	W:	ΑE	AG	AL	ΜA	ΑT	AU	ΑZ	BA	BB	BG	BR	BY	ΒZ	CA	CH	CN	CO	CR	CU
CZ		DE	DK	DM	DZ	EC	EE	EG	ES	FI	GB	GD	GE	GH	GM	HR	HU	ID	ΙL	IN
IS																				
N#37		JP	KE	KG	KP	KR	KZ	LC	LK	LR	LS	LT	LU	ΓΛ	MA	MD	MG	MK	MN	MW
MX		M7.	NT	NO	NZ	ОМ	PG	рн	ÞΓ.	PΨ	RΩ	ווא	sc	SD	SE	SG	SK	ST.	SY	ד.יד
TM		• ••	***	1.0	.,.	011	- 0	- 11						כט	בנ			J.L	51	τÓ

TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW AU 2003299230 A1 20040714 (200474)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
		WO 2003-EP51000	20031215
AU 2003299230	A1	AU 2003-299230	20031215

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AII 2003299230	Al Based on	WO 2004056888

PRIORITY APPLN. INFO: US 2003-509032P

20031006; US

2002-436040P

20021223

AN 2004-543302 [52] WPIX

AB WO2004056888 A UPAB: 20040813

NOVELTY - A polymeric compound comprises at least one bisallyl ammonium cationic monomer, a hydrophobic unsaturated nonionic monomer and optionally a water-soluble monomer and a crosslinking agent.

DETAILED DESCRIPTION - A polymeric compound (P1) comprises (weight%) at least one bisallyl ammonium cationic monomer (20 - 99.9)

(A) of formula (I), a hydrophobic unsaturated nonionic monomer (0.1 - 80) (B) polymerizing in the presence of an initiator and optionally a water-soluble monomer (0 - 60) (C) different from either (A) or (B) and a crosslinking agent (0 - 10) (D).

R1 and R2 = H or 1-4C alkyl;

R3 and R4 = alkyl, hydroxyalkyl, carboxyalkyl, carboxyamidealkyl, alkoxyalkyl (all containing 1-18C atoms) or

Y- = anion.

Η;

An INDEPENDENT CLAIM is included for a cleaning product comprising (P1) (0.001 - 50 weight%) and at least one surfactant.

USE - As a cleaning product (e.g. laundry detergent, fabric conditioner, pre- and post-treatment agent, tumble dry sheet and dishwashing formulation); in textile processing formulation; and in dyeing or printing auxillaries and/or finishing agents (all claimed).

ADVANTAGE - The polymeric compound exhibits improved dye fixation, dye transfer inhibition, wet fastness and prevents color

fading of the textile. Dwg.0/0

L110 ANSWER 5 OF 23 APOLLIT COPYRIGHT 2005 FIZ KA on STN

ACCESSION NUMBER:

2005:1817 APOLLIT

TITLE:

Novel biodegradable cholesterol-modified polyrotaxane hydrogels for cartilage

regeneration

AUTHOR:

Tachaboonyakiat, W.; Furubayashi, T.; Katoh,

M.; Ooya, T.; Yui, N. (Innovation Plaza Ishikawa, Japan Science and Technology

Agency,

Ishikawa (JP); Japan Tissue Engineering Co.,

Ltd., Aichi (JP); School of Materials

Science,

Japan Advanced Inst. of Science and

Technology, Ishikawa (JP))

SOURCE:

Journal of Biomaterials Science. Polymer Edition (2004) v. 15(11), p. 1389-1404, Festschrift on the occasion of the 70th birthday of Allan S. Hoffman. Gels, genes,

grafs and giants. Pt. 5

ISSN: 0920-5063

DOCUMENT TYPE:

LANGUAGE:

Journal English

Cholesterol was introduced to a hydrolyzable polyrotaxane (PRx), not only to improve cell proliferation and glycosaminoglycan (GAG) production, but also to control the degradation rate of

the

AB

hydrogels. The cholesterol was introduced to hydrolyzable PRx species by threading many #alpha#-cyclodextrins (#alpha#-CDs) on a poly(ethylene glycol) (PEG) chain having hydrolyzable ester linkages at the terminals; the PRx species were then cross-linked with other PEGs to prepare cholesterol-modified PRx hydrogels. The degree of cholesterol substitution was varied in the range of 1-25%. These hydrogels were examined to clarify the effect of cholesterol groups on mechanical properties, erosion time and chondrocyte proliferation. Highly porous biodegradable cholesterol-modified PRx hydrogels were fabricated using a combination of potassium hydrogen carbonate (as an effervescent salt) and citric acid. This fabrication process enabled the homogeneous expansion of pores within the polymer

enabled the homogeneous expansion of pores within the polymer matrices, leading to well-interconnected macroporous hydrogels with a mean pore size of around 200-400 #mu#m, ideal for high-density chondrocyte seeding. Time to complete degradation

of

the hydrogels was shortened by increasing the degree of substitution due to the aggregation of #alpha#-CDs through hydrophobic interaction of cholesterol groups. The presence of approx. 10% cholesterol improved the chondrocyte proliferation and GAG production. The modification of cholesterols to PRx is a good approach for creating new biodegradable hydrogels in terms of chondrocyte culture and controlling degradation time of the hydrogels. (orig.)

L110 ANSWER 6 OF 23 APOLLIT COPYRIGHT 2005 FIZ KA on STN

ACCESSION NUMBER:

2004:9120 APOLLIT

TITLE:

31th journal on polymer research. JEPO 31 31emes journees d'Etude de Polymeres, JEPO 31

CORPORATE SOURCE:

Groupe Français d'Etudes et d'Applications

des

Polymeres (GFP), 67 - Strasbourg (FR)

, 124 p.

Conference: JEPO 31: 31. conference on polymers. JEPO 31: 31. journees d'etude des polymeres, Bouvines (France), 21-26 Sep 2003

Miscellaneous; Conference

DOCUMENT TYPE:

LANGUAGE:

French

The following lectures were held: Intelligent molding and AB composites; Latest developments of high-performance fibers, including PBO, M5 nanocomposites; Polyaddition in dispersions: new core-shell matrix polyurethanes; Nanocomposites with polyester matrix; Control of the dispersion state in nanocomposites; Stimulable macromolecules; Cable insulation polymer; Composite materials for space applications; Grafting of cyclodextrines onto natural and synthetic fibers ; Liquid crystalline ordering in polymers; Transition metals for the synthesis of polymers with complex architecture; Aqueous solutions; NMR studies of cyclodextrin inclusions complexes; Photooxidation of iPP; POSS/methacrylate as organic/inorganic hybrid materials; Morphology and mechanical properties of compatibilized PP/clay nanocomposites; Polymer supports for extraction of metal cations; Modification of linear PEIs; Measure of space charge via thermal current methods; Novel aluminium catalysts for the activation of metallocenes in olefin polymerizations; Synthesis and characterization of poly(glycolic acid) in ionic media; Taylormade polymacromeres; Synthesis of PI/silicon hybrid materials; New radical polymerisation catalysts; Polymer/silicon nanospheres; Effects of melt processing conditions on the morphology and mechanical properties of nylon 6/raw montmorillonite nanocomposites; Nanostructuring of thermoplastics/curable plastics blends by means of SBM triblock copolymers; Improving

fiber/matrix adhesion by chemical methods; Model studies
 of ionic irradiation of amidon/lignin blends; Local dynamics and
 solid state transitions of poly(di n-alkyl itaconate)s;
 Microencapsulation of diisocyanate; Novel architecture of
 macromolecules based on functional silicones; Miscibility
studies

of poly(styrene-co methacrylic acid) and PiBM containing a basic comonomer; Ultrarapid synthesis of clay/polymer nanocomposites via photopolymerisation; Synergism

in

polymer matrix nanocomposites; Phospha-calix(4)arenes:
organometallics in confined space; Viscosimetric behavior of the
polyelectrolyte system AD37-P4VP in aqueous solution; Het
curables with hyperbranched structure; Crosslinking of
elastomers

in course of aging; Composites based on wood and biodegradable
 polymers; Curables/thermoplastics blends for RTM; RAFT:
Synthesis

of PMMA-b-poly(trialkylsilyl methacrylate) diblocks;
Polymerisation of epsilon-caprolactone with borohydrides;
Mechanical behavior of PA6 based blends; Reaction mechanism of superplastifying polymers in cements; Vitrification of irradiation-polymerized acrylic resins; PURs based on aqueous dispersions of functionalised polybutadienes; Semi-IPNs and IPNs based on PDLLA; Emulsion stabilizers based on amphiphilic dextrane derivatives; Reactive textiles for thermo-regulation; Hyperbranched polymers for photon conducting membranes; Spatial organisation of fullerenes in a matrix; PMMA matrix nanocomposites reinforced with layered clay; Reactivity

of

hydrogene stannates grafted onto soluble polymer supports.

L110 ANSWER 7 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2003:855982 HCAPLUS

DOCUMENT NUMBER:

139:338810

TITLE:

Hydrogels having enhanced elasticity and

mechanical strength properties

INVENTOR(S):

Omidian, Hossein; Qiu, Yong; Yang, Shicheng;

Kim, Dukjoon; Park, Haesun; Park, Kinam

PATENT ASSIGNEE(S):

Purdue Research Foundation, USA PCT Int. Appl., 91 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

. .

FAMILY ACC. NUM. COUNT:

English

PATENT INFORMATION:

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PATENT NO.
                          KIND
                                 DATE
                                             APPLICATION NO.
DATE
     WO 2003089506
                         A1
                                 20031030
                                             WO 2003-US12340
2003
0422
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA,
             CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI,
             GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,
             KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,
             MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD,
             SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC,
             VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ,
             DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL,
             PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     US 2003232895
                         A1
                                20031218
                                            US 2003-420323.
2003
0422
PRIORITY APPLN. INFO.:
                                            US 2002-374388P
2002
0422
AB
     Hydrogels having improved elasticity and mech. strength
properties
     are obtained by subjecting a hydrogel formulation containing a
     strengthening agent to chemical or phys. crosslinking conditions
     subsequent to initial gel formation. Superporous hydrogels
having
     improved elasticity and mech. strength properties are similarly
     obtained whenever the hydrogel formulation is provided with a
```

water
sorption properties while the strengthening polymer imparts
significantly enhanced mech. strength and elasticity to the
hydrogel or superporous hydrogel. Suitable strengthening agents

comprised of primary polymer(s) and strengthening polymer(s) are thereby formed. The primary polymer affords capillary-based

foaming agent. Interpenetrating networks of polymer chains

can be natural or synthetic polymers, polyelectrolytes, or neutral, hydrophilic polymers. Thus, 50% acrylamide solution 500,

1.0% N,N-methylenebisacrylamide solution 100, 10.0% Pluronic F 127

solution 50, glacial acetic acid 50, and 2% aqueous sodium alginate solution

1500 μ l were mixed, 50 μ l 20% ammonium persulfate solution and 50 μ l 20% N,N,N',N'- **tetramethylenediamine** solution was added therein, 30 mg sodium **bicarbonate** was added therein and reacted, poured into an 30% aqueous calcium chloride solution, washed, and dried to give a porous hydrogel with good stretching, compression, and bending stress resistance.

IT 9003-01-4D, crosslinked

(Carbopol, interpenetrating networks; preparation of hydrogels having enhanced elasticity and mech. strength properties)

RN 9003-01-4 HCAPLUS

CN 2-Propenoic acid, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7 CMF C3 H4 O2

IT 25014-41-9P, Polyacrylonitrile

(interpenetrating networks; preparation of hydrogels having enhanced

elasticity and mech. strength properties)

RN 25014-41-9 HCAPLUS

CN 2-Propenenitrile, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 107-13-1 CMF C3 H3 N

 $H_2C = CH - C = N$

IT 9003-01-4, Polyacrylic acid

57033-29-1P

```
12619-70-4, Cyclodextrin
        (interpenetrating networks; preparation of hydrogels having
enhanced
        elasticity and mech. strength properties)
RN
     9003-01-4 HCAPLUS
CN
     2-Propenoic acid, homopolymer (9CI) (CA INDEX NAME)
     CM
     CRN
         79-10-7
     CMF
          C3 H4 O2
HO-C-CH=CH2
RN
     12619-70-4 HCAPLUS
     Cyclodextrin (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     ICM C08J009-40
     ICS C08G063-48; C08F116-06; C08F016-06; C08F216-06
CC
     38-3 (Plastics Fabrication and Uses)
     Section cross-reference(s): 33, 63
IT
     Fibers
        (cellulosic, interpenetrating networks; preparation of
hydrogels
        having enhanced elasticity and mech. strength properties)
IT
     Amines, uses
        (polyamines, nonpolymeric, amido, epixhlorohydrin
        adducts, interpenetrating networks; preparation of hydrogels
having
        enhanced elasticity and mech. strength properties)
IT
     9003-01-4D, crosslinked
        (Carbopol, interpenetrating networks; preparation of hydrogels
        having enhanced elasticity and mech. strength properties)
IT
     7758-29-4, Pentasodium triphosphate
        (complexing agent; preparation of hydrogels having enhanced
        elasticity and mech. strength properties)
IT
     25014-41-9P, Polyacrylonitrile
                                      25034-58-6P,
    Acrylamide-N,N-methylenebisacrylamide copolymer
                                                      27791-59-9P,
    Acrylamide-acrylic acid-N,N-
```

88581-65-1P, Acrylamide-acrylic

methylenebisacrylamide copolymer 31132-41-9P, Acrylamide-N,N-ethylenebisacrylamide copolymer

78705-27-8P

```
acid-N,N-methylenebisacrylamide-sodium acrylate copolymer
     112869-89-3P, Acrylamide-trimethylolpropane triacrylate copolymer
                   616872-46-9P
     616872-45-8P
                                  616872-47-0P
        (interpenetrating networks; preparation of hydrogels having
enhanced
        elasticity and mech. strength properties)
IT
     154-23-4, Catechin
                       327-97-9, Chlorogenic acid
     490-46-0, Epicatechin 497-76-7, Arbutin
                                                1398-61-4, Chitin
     9000-69-5, Pectin 9002-89-5, Polyvinyl alcohol 9002-98-6
     9003-01-4, Polyacrylic acid
     9003-05-8, Polyacrylamide
                               9003-39-8, Polyvinyl pyrrolidone
     9004-32-4, Carboxymethyl cellulose 9004-34-6, Cellulose, uses
     9004-54-0, Dextran, uses 9004-61-9, Hyaluronic acid
9005-25-8,
                   9005-32-7, Alginic acid 9005-38-3, Algin
     Starch, uses
     9005-53-2, Lignin, uses 9012-76-4, Chitosan
                                                    9042-14-2,
     sulfate 9063-38-1, Sodium starch glycolate
                                                   11138-66-2,
Xanthan
     12619-70-4, Cyclodextrin 24937-47-1,
     Poly(L-arginine)
                     24991-23-9 25068-14-8, Polyacrolein
     25213-33-6, Polyproline 25322-64-9 25322-68-3, Polyethylene
     glycol 25987-30-8, Acrylic acid-acrylamide
     copolymer sodium salt 26062-79-3, Diallyldimethylammonium
     chloride homopolymer
                           26063-13-8, Poly(aspartic acid)
     26521-10-8, Polysarcosine 31851-29-3 38000-06-5,
     Poly(L-lysine) 50851-57-5 59680-46-5, Kymene 557H
     63183-41-5, Sodium glycine carbonate 142804-65-7,
             187606-35-5, 2-Hydroxyethyl acrylate-polyethylene glycol
     diacrylate copolymer
        (interpenetrating networks; preparation of hydrogels having
enhanced
       elasticity and mech. strength properties)
IT
     56631-51-7P, Acrylic acid-polyethylene glycol
    diacrylate copolymer 212117-07-2P, Acrylic
     acid-2-hydroxyethyl acrylate copolymer calcium salt
     616872-48-1P
        (preparation of hydrogels having enhanced elasticity and mech.
       strength properties)
REFERENCE COUNT:
                              THERE ARE 2 CITED REFERENCES AVAILABLE
                              FOR THIS RECORD. ALL CITATIONS
AVAILABLE
                              IN THE RE FORMAT
L110 ANSWER 8 OF 23
                    HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
```

2003:947697 HCAPLUS

140:6256

DOCUMENT NUMBER:

TITLE: Ink-jet recording sheets containing ink

receiver layers with good adhesion and ink

absorption

INVENTOR(S):
Burch, Eric L.; Brugger, Pierre-Alain;

Staiger, Martin

PATENT ASSIGNEE(S): Hewlett-Packard Company, USA

SOURCE: Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO.

DATE

EP 1366925 A1 20031203 EP 2003-253180

2003

0521

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,

EE, HU, SK

US 2003224127 A1 20031204 US 2002-159250

2002

0531

US 6872430 B2 20050329

JP 2004001528 A2 20040108 JP 2003-150450

2003

0528

PRIORITY APPLN. INFO.: US 2002-159250 A

2002

0531

Α

AB The title sheets contain a support substrate (A) and ink-jet receiver layers (B), wherein B contains at least one binder and one pigment, and with a gradient in ratio of binder to pigment.

typical example was a PET film (Melinex type) coated with an

ink-jet receiver layer containing aluminum oxide as pigment and poly(vinyl alc.) as binder.

IT 7585-39-9, β - Cyclodextrin

10016-20-3, α - Cyclodextrin

17465-86-0, γ - Cyclodextrin

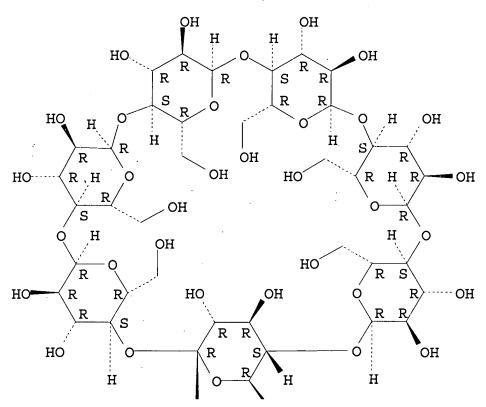
(binder; fabrication of ink-jet recording sheets containing ink receiver layers with good adhesion and ink absorption)

RN 7585-39-9 HCAPLUS

CN β -Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

RN 10016-20-3 HCAPLUS CN α -Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 17465-86-0 HCAPLUS CN γ -Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

IC ICM B41M005-00

CC 42-10 (Coatings, Inks, and Related Products)

Section cross-reference(s): 38

IT Inks

> (jet-printing; fabrication of ink-jet recording sheets containing ink receiver layers with good adhesion and

absorption)

IT Polyesters, uses

> (support film, Melinex; fabrication of ink-jet recording sheets containing ink receiver layers with good

adhesion

ink

and ink absorption)

IT Plastic films

> (support; in fabrication of ink-jet recording sheets containing ink receiver layers with good adhesion and ink absorption)

IT Coating materials

> (water-thinned; for ink receiver layers and fabrication of ink-jet recording sheets therefrom)

75-21-8D, Ethylene oxide, polymers or copolymers IT 79-06-1D, Acrylamide, polymers or copolymers 79-10-7D, Acrylic

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acid, derivs., polymers 79-39-0D, Methacrylamide,
     polymers or copolymers
                              108-05-4D, Vinyl acetate,
     polymers or copolymers 108-31-6D, Maleic anhydride, copolymers
     7585-39-9, \beta- Cyclodextrin
                                 9003-39-8,
     Poly(vinylpyrrolidone) 9003-47-8, Poly(vinylpyridine)
     9004-32-4 9004-62-0, Hydroxyethyl cellulose 9005-25-8,
Starch,
            9005-36-1, Potassium alginate 9005-38-3, Sodium alginate
     10016-20-3, \alpha- Cyclodextrin
     17465-86-0, \gamma- Cyclodextrin
        (binder; fabrication of ink-jet recording sheets
        containing ink receiver layers with good adhesion and ink
        absorption)
IT
     625450-57-9, Cartacoat 302C 625450-73-9, Cartacoat 303C
        (cationic colloidal silica, pigment/topcoat;
        fabrication of ink-jet recording sheets containing ink
        receiver layers with good adhesion and ink absorption)
     471-34-1, Calcium carbonate, uses 546-93-0, Magnesium
IT
     carbonate 1309-42-8, Magnesium hydroxide
     1314-13-2, Zinc oxide, uses 1335-30-4, Aluminum silicate
     1343-88-0, Magnesium silicate 1344-95-2, Calcium silicate
     1345-05-7, Lithopone 3486-35-9, Zinc carbonate
     7727-43-7, Barium sulfate 7733-02-0, Zinc sulfate
                                                          7778-18-9,
     Calcium sulfate 12344-48-8, Satin white 13463-67-7, Titanium
     dioxide, uses
                     14807-96-6, Talc, uses 21645-51-2, Aluminum
     hydroxide, uses
        (pigment; fabrication of ink-jet recording sheets
        containing ink receiver layers with good adhesion and ink
        absorption)
IT
     25038-59-9, Polyethylene terephthalate, uses
        (support film, Melinex; fabrication of ink-jet
        recording sheets containing ink receiver layers with good
adhesion
        and ink absorption)
REFERENCE COUNT:
                               THERE ARE 6 CITED REFERENCES AVAILABLE
                              FOR THIS RECORD. ALL CITATIONS
AVAILABLE
                              IN THE RE FORMAT
L110 ANSWER 9 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
                        2004:864211 HCAPLUS
TITLE:
                        Improving the durable press performance of
                        citric acid finished cotton
                        fabrics using reactive
                        cyclodextrin
AUTHOR(S):
                        El-Hilw, Z. H.; Hebeish, A.
CORPORATE SOURCE:
                        Textile Research Division, National Research
```

Centre, Cairo, Egypt

SOURCE:

Egyptian Journal of Textile and Polymer Sciences and Technology (2003), Volume Date

2002, 6, 91-111

CODEN: EJTPAB; ISSN: 1110-600X

PUBLISHER:

National Information and Documentation Centre

DOCUMENT TYPE:

Journal English

LANGUAGE: AB

Monochlorotriazinyl derivative of B-cyclodextrin, simply termed reactive cyclodextrin (RCD), was used along with citric acid (CA) and sodium

hypophosphite (SHP) with a view to develop effective formaldehyde free durable press (DP) finishing system for cotton fabrics. While, CA acts as the crosslinking agent, SHP serves as the catalyst for esterification and crosslinking of cotton with CA. The finishing treatment was carried out as per the conventional pad-dry-cure method. finished samples were monitored for nitrogen content, carboxyl content, wrinkle recovery angle (WRA), DP rating, strength properties and whiteness index. Presence of significant amount

of

nitrogen in the finished fabric, after being thoroughly washed as taken to indicate the involvement of RCD in reactions occurring between CA and cotton cellulose. Similarly, determination of

significant amount of carboxyl group's calls for esterification of

cotton cellulose with CA via single ended reactions. On the other

hand, the significant improvement in WRA and DP rating along with the substantial decrease in strength properties was taken as evidence for crosslinking of cotton cellulose with involvement of RCD in such crosslinking reactions. It should be noted, however, that the values of WRA, DP rating and strength properties of the finished fabrics were much higher in presence than in absence of RCD. The latter, seems to protect then cotton cellulose from mol. degradation by CA hydrolysis and/or from rigidity

confered by crosslinking. The work was further extended to examine the effects on finished fabric

performance of polyethylene glycol concentration, partial replacement of

CA with low formaldehyde N-methylol finishing agent, during temperature

and time.

40 (**Textiles** and Fibers)

REFERENCE COUNT:

18

THERE ARE 18 CITED REFERENCES AVAILABLE

FOR THIS RECORD. ALL CITATIONS

AVAILABLE

IN THE RE FORMAT

L110 ANSWER 10 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2002:928017 HCAPLUS

DOCUMENT NUMBER:

138:8425

TITLE:

Enzyme cleaning composition for the safe

removal of indoor allergens

INVENTOR(S):

Pearl, Richard E.; Zeilinger, Scott E.

PATENT ASSIGNEE(S):

Pentagonal Holdings, Inc., USA

SOURCE:

U.S. Pat. Appl. Publ., 8 pp., Cont. of U.S.

Ser. No. 612,637.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

DATE	PATENT NO.	KIND	DATE	APPLICATION NO.					
) :	44444								
*	US 2002182184	, A1	20021205	US 2002-152558					

2002

0521

PRIORITY APPLN. INFO.:

US 1999-143186P

1999

0709

US 2000-612637 A1

2000

0707

AB This invention provides for an enzymic cleaning composition that will

reduce and remove allergens and perform general cleaning at the same time. The enzymic cleaning composition comprises an enzyme and/or

a bacterial spore substance capable of producing enzymes, a wetting agent, an odor-encapsulating agent, a neutralizing agent,

a surfactant-encapsulating agent, an embrittling agent and water. The enzymic composition is applied to carpets, upholstery, drapes and other fabrics, and hard surfaces. The applied composition dries and subsequently the allergens can be removed. Addnl., the present invention provides for a new and unique manner of delivery of the enzymic composition IT 12619-70-4, Cyclodextrin (odor-encapsulating agent; enzyme cleaning composition for the safe removal of indoor allergens) RN12619-70-4 HCAPLUS Cyclodextrin (9CI) (CA INDEX NAME) CN *** STRUCTURE DIAGRAM IS NOT AVAILABLE *** IC ICM A61K038-54 A61K038-44; A61K038-51; A61K038-52; A61K038-53; A61K038-46; A61K038-47 NCL 424093400; 424093460; 424094200; 424094400; 424094500; 424094610; 424094600 CC 63-8 (Pharmaceuticals) Section cross-reference(s): 7, 46 IT 25085-34-1, Acrylic acid-styrene copolymer (embrittling agent; enzyme cleaning composition for the safe removal of indoor allergens) 9000-90-2, α -Amylase 9000-92-4, Amylase IT 9001-05-2, 9001-62-1, Lipase 9001-92-7, Protease 9012-54-8, Cellulase 9032-08-0, Glycoamylase 9032-75-1, Pectinase 9055-00-9, Glucose isomerase 9074-98-0, β-Glucanase 50812-17-4, Galactomannanase (enzyme cleaning composition for the safe removal of indoor allergens) IT 144-55-8, Sodium bicarbonate, biological studies (neutralizing agent; enzyme cleaning composition for the safe removal of indoor allergens) IT 497-19-8, Sodium carbonate, biological studies 1310-58-3, Potassium hydroxide, biological studies 1310-73-2, Sodium hydroxide, biological studies 12619-70-4, Cyclodextrin (odor-encapsulating agent; enzyme cleaning composition for the safe removal of indoor allergens)

L110 ANSWER 11 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1 ACCESSION NUMBER: 2001:936882 HCAPLUS

DOCUMENT NUMBER:

136:233412

TITLE:

Polycarboxylic acids as crosslinking agents

for grafting cyclodextrins onto cotton and wool fabrics: study of

the process parameters

AUTHOR(S):

Martel, B.; Weltrowski, M.; Ruffin, D.;

Morcellet, M.

CORPORATE SOURCE:

Laboratoire de Chimie Organique et

Macromoleculaire UPRESA-CNRS 8009 Universite

des Sciences et Technologies de Lille,

Villeneuve d'Ascq, 59650, Fr.

SOURCE:

Journal of Applied Polymer Science (2002),

83(7), 1449-1456

CODEN: JAPNAB; ISSN: 0021-8995

PUBLISHER:

John Wiley & Sons, Inc.

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB A new method for the grafting of cyclodextrins (CDs) onto cotton or wool fabrics is described. The novelty principally concerns the chemical approach of the grafting

reaction

that was carried out in the presence of polycarboxylic acids, such

as 1,2,3,4-butanetetracarboxylic acid, citric acid, or polyacrylic acid. All types

of native or CD derivs. could be used successfully as long as they

carried enough remaining hydroxyl groups. For example, the amount

of native β -CD fixed onto the **fabrics** increased up to 12% in weight, whereas this value decreased to only 3% for the randomly methylated derivative of β -CD (RAMEB). Phosphorous salts, such as sodium mono- and dihydrogen **phosphate** or sodium dihydrogen **hypophosphite**, **catalyzed** the reaction. On the other hand, the conventional and convenient pad-dry-cure technique that is currently used at the industrial scale in **textile** processing was applied. The polycarboxylic acids play the role of linking agent through an esterification (or amidification) reaction with the OH (or NH2) groups of both CD and cotton (or wool) **fibers**. In addition, this reaction could lead to the graft of a copolymer formed

between CD and the polycarboxylic acid. The reaction yield depends on the concentration and nature of the aforementioned reactants

and catalysts and on the curing conditions (time and temperature).

```
IT 77-92-9, Citric acid, uses
    1703-58-8, 1,2,3,4-Butanetetracarboxylic acid
    7585-39-9, β- Cyclodextrin
    7585-39-9D, β- Cyclodextrin, methylated
    9003-01-4, Polyacrylic acid
    10016-20-3, α- Cyclodextrin
    17465-86-0, γ- Cyclodextrin
        (process parameters for polycarboxylic acids as crosslinking agents for grafting cyclodextrins onto cotton and wool fabrics)
RN 77-92-9 HCAPLUS
CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy- (9CI) (CA INDEX NAME)
```

$$\begin{array}{c} {\rm CO_2H} \\ | \\ {\rm HO_2C-CH_2-C-CH_2-CO_2H} \\ | \\ {\rm OH} \end{array}$$

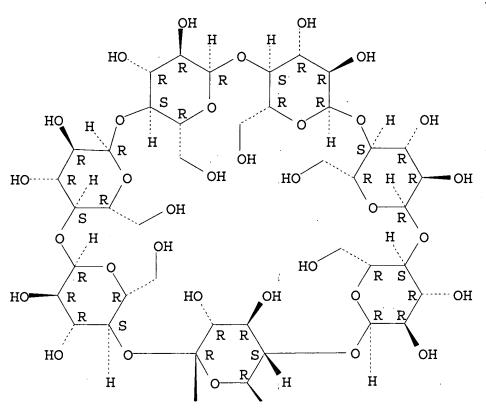
RN 1703-58-8 HCAPLUS CN 1,2,3,4-Butanetetracarboxylic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \operatorname{HO_2C} & \operatorname{CO_2H} \\ & & \\ \operatorname{HO_2C-CH_2-CH-CH-CH_2-CO_2H} \end{array}$$

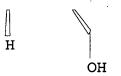
RN 7585-39-9 HCAPLUS CN β -Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



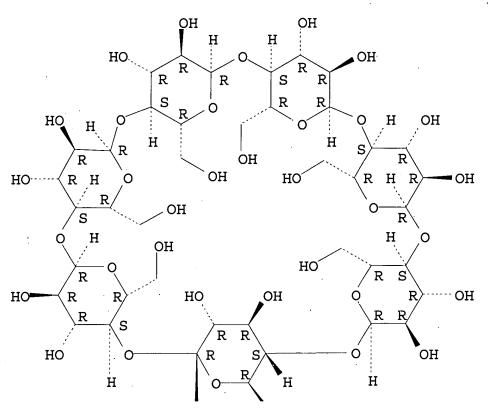
PAGE 2-A



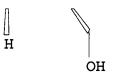
RN 7585-39-9 HCAPLUS CN β -Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



RN 9003-01-4 HCAPLUS

CN 2-Propenoic acid, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7

CMF C3 H4 O2

RN 10016-20-3 HCAPLUS

CN α -Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 17465-86-0 HCAPLUS

CN γ -Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

CC 40-3 (**Textiles** and Fibers)

ST polycarboxylic crosslinking agent grafting cyclodextrin cotton wool fabric

IT Textiles

(cotton; process parameters for polycarboxylic acids as crosslinking agents for grafting cyclodextrins onto cotton and wool fabrics)

IT Crosslinking

Crosslinking agents

Esterification

(process parameters for polycarboxylic acids as crosslinking agents for grafting cyclodextrins onto cotton and wool fabrics)

IT Textiles

(wool; process parameters for polycarboxylic acids as crosslinking agents for grafting cyclodextrins onto cotton and wool fabrics)

IT 77-92-9, Citric acid, uses

1703-58-8, 1,2,3,4-Butanetetracarboxylic acid

7585-39-9, β - Cyclodextrin

7585-39-9D, β - Cyclodextrin, methylated

9003-01-4, Polyacrylic acid

10016-20-3, α - Cyclodextrin 17465-86-0, γ - Cyclodextrin

(process parameters for polycarboxylic acids as crosslinking agents for grafting cyclodextrins onto cotton and

wool fabrics)

REFERENCE COUNT:

20

THERE ARE 20 CITED REFERENCES AVAILABLE

FOR THIS RECORD. ALL CITATIONS

AVAILABLE

IN THE RE FORMAT

L110 ANSWER 12 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2001:320052 HCAPLUS

DOCUMENT NUMBER:

134:312845

TITLE:

Compositions for treating shoes and methods

and articles employing same

INVENTOR(S):

Baker, Keith Homer; Siklosi, Michael P.; Na,

Henry Cheng; Strang, Janine Morgens; Haeggberg, Donna Jean; Scheper, William Michael; Sheets, Connie Lynn; Tollens,

Fernando Ray; Murray, Michael Glen; Creedon, Michael Timothy; Wahl, Errol Hoffman; Trinh,

Toan; Sadlowski, Eugene Steven; Becks,

Vincent

J.

PATENT ASSIGNEE(S):

Procter & Gamble Co., USA

SOURCE:

PCT Int. Appl., 172 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

TANGUAGE

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO.

DATE

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WO 2001030955 A1 20010503 WO 2000-US29236

2000

1020

WO 2001030955 C2 20020704 WO 2001030955 C1 20020919

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA,

CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD,

GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,

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             PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE,
             SN, TD, TG
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             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     EP 1222244
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                                          EP 2000-972343
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             MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL
    EP 1224350
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                                           EP 2000-973765
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    EP 1224350
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0826	US	2004	06732	22		A1	2004	0408	U	S 2	2003-	67196	59	<i>.</i>	
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0926	US	2004	10235	50		A 1	20040)527	U	5 2	2003-	67285	54		
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USHA SHRESTHA EIC 1700 REM 4B28

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WO 2000-US29162

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WO 2000-US29236 W

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US 2001-7449 A1

2001

1105

AB The present invention relates to compns. for treating shoes, especially

leather-containing shoes, such as athletic shoes, and methods
 and articles of manufacture employing same to treat the shoes
prior to

and/or during and/or after washing the shoes. More particularly, the present invention relates to compns. applied to one or more shoes in need of treatment prior to and/or during and/or after washing the shoes for imparting a desired benefit to the shoes such as cleaning and/or conditioning and/or disinfecting and/or deodorizing. A method for treating one or more shoes comprising contacting the one or more shoes directly or indirectly with one or more treating compns. according to any of the preceding

A method of imparting one or more desired benefits to a shoe comprising applying an effective amount of one or more benefit agents provided by using the title treating composition with or without

a washing process. Thus, cleaning agent-containing treating composition

can be formulated as follows : acrylic acid-maleic acid copolymer 26.2; nonionic surfactant

12.6, Tween 20 12.6, Na Citrate 1.7, NaOH 0.8, silicone suds suppresser 0.3, minors (dye, perfume, preservative) 2, fluorescent

whitening agent 0.2, and water 43.5.

IT 7585-39-9, β -Dextrin

(deodorant; compns. and methods for treating shoes)

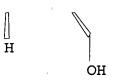
RN 7585-39-9 HCAPLUS

CN β -Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A



- IC ICM C11D003-37 ICS C11D001-72
- CC 46-5 (Surface Active Agents and Detergents)
- IT Surfactants

(cationic; compns. and methods for treating shoes)

IT Antibacterial agents
Antimicrobial agents
Deodorants
Detergents

Disinfectants

USHA SHRESTHA EIC 1700 REM 4B28

```
Fungicides
       Leather
       Leather substitutes
     Perfumes
     Shoes
     Thickening agents
     Waterproofing agents
        (compns. and methods for treating shoes)
TT
     56-81-5, Glycerin, uses 56-84-8D, Aspartic acid, esters,
     polymers 57-50-1D, Sucrose, polyester 67-63-0, Isopropanol,
            79-10-7D, Acrylic acid, esters,
     uses
     polymers
                79-14-1D, Glycolic acid, esters, polymers
                        98-11-3D, Benzenesulfonic acid, linear alkyl
     Coumarin, derivs.
     derivs., sodium salt, uses
                                 102-76-1, Triacetin
                                                       112-05-0,
                    139-44-6, Trihydroxystearin
     Nonanoic acid
                                                  334-48-5, Decanoic
            497-19-8, Sodium carbonate, uses
                                              994-36-5,
     Sodium Citrate 1300-72-7, Sodium xylene sulfonate
                                                          1310-73-2.
     Sodium Hydroxide, uses
                             7722-88-5, Sodium
     pyrophosphate
                    7757-82-6, Sodium sulfate, uses
     7758-29-4, Sodium tripolyphosphate
                                        9001-92-7, Protease
     9003-04-7, Acusol 445N 9004-32-4, Carboxymethyl cellulose
     9005-64-5, Tween 20
                         9012-54-8, Cellulase 9016-00-6,
     Poly[oxy(dimethylsilylene)] 25322-68-3, PEG 25322-68-3D,
     Polyethylene glycol, alkyl ether 31900-57-9,
Dimethylsilanediol,
     homopolymer
                  60472-42-6, Sokalan CP 5
                                             60650-94-4, Tinopal
     AMS-GX
              178949-82-1
        (compns. and methods for treating shoes)
IΤ
     7585-39-9, \beta-Dextrin
        (deodorant; compns. and methods for treating shoes)
IT
     55-56-1, Chlorohexidine
                             55-56-1D, Chlorohexidine, salt
     121-54-0, Benzethonium chloride 123-03-5, Cetylpyridinium
     chloride
               4080-31-3, N-(3-Chloroallyl) hexaminium chloride
     4252-56-6
               6248-28-8, Benzoyl caprolactam
                                                 10543-57-4,
     Tetraacetyl ethylenediamine
                                  14468-76-9,
     4-Nitrobenzoylcaprolactam 25155-18-4, MethylBenzethonium
               32289-58-0, Polyhexamethylene Biguanide hydrochloride
     101482-85-3D, Nonanoyloxybenzenesulfonic acid, salt
     101843-38-3D, Dodecanoic acid, sulfophenyl ester, salt
                  104788-71-8, N-Lauroyl-(6-aminoperoxycaproic acid)
     104788-67-2
     104788-73-0, N-Nonanoyl-(6-aminoperoxycaproic acid)
     108608-43-1D, OctanoyloxyBenzenesulfonic acid, salt
                                                          128275-31-0
     133725-71-0
                  168051-91-0, 3-Chlorobenzoylcaprolactam
     168151-92-6, 4-[N-(Nonanoyl)amino
hexanoyloxy] hexanoyloxybenzenesu
     lfonic acid sodium salt
                              181381-62-4D, Decanoyloxybenzoic acid,
     salt
           201413-62-9D, salt 223712-92-3D,
```

Benzoyloxybenzenesulfonic acid, salt 223712-95-6D, 10-Undecenoyloxybenzenesulfonic acid, salt

(disinfecting agent; compns. and methods for treating shoes)

REFERENCE COUNT:

15 THERE ARE 15 CITED REFERENCES AVAILABLE

FOR THIS RECORD. ALL CITATIONS

AVAILABLE

IN THE RE FORMAT

L110 ANSWER 13 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2001:797950 HCAPLUS

DOCUMENT NUMBER:

135:335192

TITLE:

Articles comprising cationic

polysaccharides and acidic pH buffering means

Pesce, Antonella; Tordone, Adelia Alessandra;

Carlucci, Giovanni; Di Cintio, Achille

PATENT ASSIGNEE(S):

The Procter and Gamble Co., USA

SOURCE:

Eur. Pat. Appl., 20 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

INVENTOR(S):

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO.

DATE

EP 1149593 A1 20011031 EP 2000-108062

2000 .

0425

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,

MC, PT, IE, SI, LT, LV, FI, RO

CA 2405603 20011101 CA 2001-2405603 AA

2001

0424

WO 2001080913 A1 20011101 WO 2001-US13158

2001

0424

AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,

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IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
              LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
              RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA,
              UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU,
              TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE,
              CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
              PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR,
             NE, SN, TD, TG
     EP 1276512
                           A1
                                 20030122
                                             EP 2001-930695
 2001
0424
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
             MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                 20031021 JP 2001-578007
     JP 2003530967
                           T2
2001
0424
     US 2003018312
                           A1
                                 20030123
                                             US 2002-238013
2002
0909
     US 6844430
                           B2
                                 20050118
PRIORITY APPLN. INFO.:
                                             EP 2000-108062
                                                                  Α
2000
0425
                                             WO 2001-US13158
2001
0424
AΒ
     The present invention relates to articles, preferably disposable
     absorbent articles like sanitary napkins and panty liners, which
     comprise a cationic polysaccharide, typically
     chitin-based material and/or chitosan material, and an acidic pH
                       Such disposable absorbent articles deliver
     buffering means.
     improved odor control performance even upon prolonged wearing
time
     of the articles.
                       A wet powder was prepared by mixing chitosan
```

pyrrolidone carboxylate powder and acidic pH buffering solution (
 citric acid/sodium hydroxide 1:1, pH =
 5) at a ratio of 1:10. The wet powder was homogeneously
 distributed between a feminine pad fiber layers which
 made the absorbent core.

IT 77-92-9, Citric acid, biological
 studies 12619-70-4, Cyclodextrin
 (articles comprising cationic polysaccharides and
 acidic pH buffering means)

RN 77-92-9 HCAPLUS
CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy- (9CI) (CA INDEX
NAME)

$$^{\mathrm{CO_2H}}_{\mid}$$
 $^{\mathrm{HO_2C-CH_2-CO_2H}}_{\mid}$ $^{\mathrm{OO_2H}}_{\mid}$ $^{\mathrm{OH}}$

RN 12619-70-4 HCAPLUS CN Cyclodextrin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IC A61L015-28; A61L015-46; A61L028-00

CC 63-6 (Pharmaceuticals)

ST absorbent **cationic** polysaccharide pH buffer; feminine pad chitosan pyrrolidone carboxylate buffer

IT Polysaccharides, biological studies
(aminodeoxy; articles comprising cationic
polysaccharides and acidic pH buffering means)

IT Absorbents
Buffers
Chelating agents
Diapers
Gelation agents
Ion exchangers
Perfumes
pH

(articles comprising cationic polysaccharides and acidic pH buffering means)

IT Acids, biological studies
Clays, biological studies
Diatomite
Polymers, biological studies
Silica gel, biological studies

```
Zeolites (synthetic), biological studies
        (articles comprising cationic polysaccharides and
        acidic pH buffering means)
IT
    Medical goods
        (incontinence pads; articles comprising cationic
        polysaccharides and acidic pH buffering means)
IT
     Sweat
        (pads for; articles comprising cationic
        polysaccharides and acidic pH buffering means)
IT
    Medical goods
        (panty liners; articles comprising cationic
       polysaccharides and acidic pH buffering means)
IT
    Medical goods
        (sanitary napkins; articles comprising cationic
       polysaccharides and acidic pH buffering means)
IT
    Medical goods
        (tampons; articles comprising cationic
       polysaccharides and acidic pH buffering means)
     62-76-0, Sodium oxalate
                               64-19-7, Acetic acid, biological
studies
    65-85-0, Benzoic acid, biological studies 77-92-9,
    Citric acid, biological studies
                                      87-69-4,
    Tartaric acid, biological studies
                                        88-99-3, Phthalic acid,
    biological studies
                         110-94-1, Glutaric acid
                                                   124-04-9, Adipic
    acid, biological studies
                               127-09-3, Sodium acetate
    144-62-7, Oxalic acid, biological studies
                                               463-79-6, Carbonic
    acid, biological studies 497-19-8, Sodium carbonate,
    biological studies
                         532-32-1, Sodium benzoate
                                                     868-14-4,
    Potassium hydrogen tartrate, biological studies
                                                       994-36-5,
Sodium
    citrate
              1310-73-2, Sodium hydroxide, biological
              6100-20-5, Potassium tetroxalate dihydrate
    studies
                                                            7440-44-0,
    Carbon, biological studies 7631-86-9, Silica, biological
studies
    7778-49-6, Potassium citrate
                                   9003-04-7, Sodium polyacrylate
    9005-25-8, Starch, biological studies 12619-70-4,
                   23311-84-4, Sodium adipate
    Cyclodextrin
                                                29801-94-3,
    Potassium phthalate
                          32224-61-6, Sodium glutarate
                                                         66267-50-3
    66267-52-5
                 84563-61-1
                              84563-62-2
                                           84563-66-6
                                                         84563-67-7
    84563-74-6
                 84563-75-7
                              84563-76-8
                                           84563-77-9
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    87582-10-3
                 91869-06-6 91869-07-7 109850-74-0
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    119519-59-4
                  119519-60-7
                                119519-64-1
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    119519-67-4
                  119519-69-6
                                119519-70-9
                                              119519-73-2
    119519-74-3 119519-77-6
                                119519-79-8
                                              135322-32-6
    266689-30-9
                 370088-61-2
                                370088-62-3
                                              370088-63-4
    370088-64-5
                  370088-65-6
                                370088-66-7
                                              370088-67-8
    370088-68-9
                  370088-69-0
                                370088-70-3
                                              370088-71-4
```

370088-73-6 370088-75-8 370088-76-9 370088-77-0

370567-71-8

(articles comprising cationic polysaccharides and acidic pH buffering means)

IT 1398-61-4, Chitin 9012-76-4, Chitosan 117522-93-7 (articles comprising cationic polysaccharides and acidic pH buffering means)

REFERENCE COUNT:

7 THERE ARE 7 CITED REFERENCES AVAILABLE

FOR THIS RECORD. ALL CITATIONS

AVAILABLE

IN THE RE FORMAT

L110 ANSWER 14 OF 23 WORLD TEXTILES COPYRIGHT 2005 Elsevier Science

B.V. on STN

ACCESSION NUMBER:

2001:2008114 WTEXTILES

TITLE:

Fibre with improved complexation qualities

and

cation-exchange properties

INVENTOR: USTL - Universite des Sciences et Techniques

de Lille; Weltrowski M.; Morcellet M.; Martel

В.

CORPORATE SOURCE:

M. Weltrowski, 7935 Salomon Brossard, Quebec

J4X 1J2, Canada.

SOURCE:

Extracts from European Patent Applications,

Part 1B: Primary Industry, Fixed Constructions, Mining, (2001), 17/48

(3647-3648) ISSN: 0943-1268

Priority Information: France, 9901967, 15 Feb

1999

PATENT INFORMATION:

DOCUMENT TYPE:

EP 1157156

Journal; Patent

COUNTRY (OF PUBLICATION): Germany, Federal Republic of

LANGUAGE:

English

AN 2001:2008114 WTEXTILES

AB The invention relates to a method for treating a fibre or a fibre-based material such as a thread, a textile material, a woven, knitted or non-woven, paper or leather in order to

improve

the adsorption qualities thereof. The invention is characterised by the following operations that are carried out successively on said fibre or material: Application of a solid mixture of cyclodextrin and/or cyclodextrin derivative(s) and/or (an) inclusion complex (es) of cyclodextrin (es)

/ or cyclodextrin derivative(s), at least one

poly(carboxylic) acid and/or at least one

polycarboxylic acid anhydride and optionally a catalyst; heating

to a temperature ranging from 150 °C and 220° C; (c) washing with water and drying. The invention also relates to fibres or fibre-based materials having an improved hydrophilic character and cation-exchange properties.

L110 ANSWER 15 OF 23 WORLD TEXTILES COPYRIGHT 2005 Elsevier Science B.V. on STN

DUPLICATE

ACCESSION NUMBER:

WTEXTILES 2001:2006445

TITLE:

Synthesis of polymers by template

polymerization. I. Template polymerization of

poly(methacrylic acid) with β -cyclodextrin

AUTHOR:

Saito R.; Okuno Y.; Kobayashi H.

CORPORATE SOURCE:

R. Saito, Dept. of Organic and Polymeric

Mat.,

Tokyo Institute of Technology, 2-12,

Ookayama,

Meguro, 152-8552, Japan.

E-mail: rsaito@polymer.titech.ac.jp

SOURCE:

Journal of Polymer Science, Part A: Polymer

Chemistry, (15 OCT 2001), 39/20 (3539-3546),

44 reference(s) ISSN: 0887-624X

DOCUMENT TYPE:

Journal; Article

COUNTRY (OF PUBLICATION): United States

LANGUAGE:

of

English

SUMMARY LANGUAGE:

English

AN 2001:2006445 WTEXTILES

AB A novel template monomer with multiple methacryloyl groups was synthesized with β -cyclodextrin by the acetylation of primary hydroxyl groups and the esterification of secondary hydroxyl groups with methacrylic acid anhydride. The average number of methacryloyl groups in the monomer was 11. The radical polymerization of the monomer was carried out with the following initiators: α, α azobisisobutylonitrile, H.sub.20.sub.2-Fe.sup.2.sup.+ redox initiator, p-xylyl-N, N-dimethyldithiocarbamate (XDC), and α-bromo-p-xylyl-N,N-dimethyldithiocarbamate (BXDC). When the concentration of the monomer was less than 4.12 10.sup.-.sup.3 M, polymerization was limited inside the molecule,

and gelation of the system was hindered. For controlled radical photopolymerization with XDC and BXDC, the methacryloyl groups

the monomer were homogeneously polymerized, and poly(methacrylic acid) with a narrow molecular weight distribution was obtained by the hydrolysis of the polymerized products.

fronty

L110 ANSWER 16 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 3

ACCESSION NUMBER:

2000:573994 HCAPLUS

DOCUMENT NUMBER:

133:178848

TITLE:

Treatment for fiber or fiber

-based material with improved retention

properties

INVENTOR(S):

Weltrowski, Marek; Morcellet, Michel; Martel,

Bernard

PATENT ASSIGNEE(S):

Universite Des Sciences Et Technologies De

Lille, Fr.

SOURCE:

PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

French

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO.

DATE

WO 2000047811

A1 20000817

20000817 WO 2000-FR378

2000

0215

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU,

CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU; ID,

IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,

LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU,

SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ,

VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH,

CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,

SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE; SN,

TD, TG

FR 2789704 A1 20000818 FR 1999-1967

1999

0215

FR 2789704 B1 20030926

CA 2362534 AA 20000817 CA 2000-2362534

2000

0215

EP 1157156

A1

20011128 EP 2000-905144

2000

0215

EP 1157156 B1 20040421

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,

MC, PT, IE, SI, LT, LV, FI, RO

AT 264937 20040515 AT 2000-905144 . E

2000

0215

ES 2220402 · T3 20041216 ES 2000-905144

2000

0215

PRIORITY APPLN. INFO.: FR 1999-1967

1999

0215

WO 2000-FR378 W

2000

0215

AB In a method for treating a fibrous material such as a thread, a woven, knitted, or nonwoven fabric, paper, or leather to improve the adsorption properties, the material undergoes a multistep treatment comprising: application of a solid mixture of cyclodextrin and/or cyclodextrin derivative and/or cyclodextrin inclusion complex, (b) at least one polycarboxylic acid and/or anhydride, and optionally (c) a catalyst; heating to 150°-220°; washing with water; and drying. invention also relates to fibers or fiber -based materials having an improved hydrophilic character and cation-exchange properties. In an example, cotton fabric is treated with β - cyclodextrin, citric acid, and Na2HPO4 to improve its ability to retain diethyltoluamide mosquito repellent. An acrylic

fiber was similarly treated to enhance the retention of phenolphthalein.

IT 7558-80-7D, Sodium dihydrogen phosphate,

hydrates 7664-41-7, Ammonia, uses

7681-53-0, Sodium hypophosphite

10039-32-4, Disodium hydrogen phosphate

dodecahydrate

(catalyst; in fabric treatment for improved
adsorbent properties)

RN 7558-80-7 HCAPLUS

CN Phosphoric acid, monosodium salt (8CI, 9CI) (CA INDEX NAME)

Na

RN 7664-41-7 HCAPLUS

CN Ammonia (8CI, 9CI) (CA INDEX NAME)

NH₃

RN 7681-53-0 HCAPLUS

CN Phosphinic acid, sodium salt (8CI, 9CI) (CA INDEX NAME)

 $o = PH_2 - OH$

Na

RN 10039-32-4 HCAPLUS

CN Phosphoric acid, disodium salt, dodecahydrate (8CI, 9CI) (CA INDEX NAME)

•2 Na

●12 H₂O

CRN 107-13-1 CMF C3 H3 N

 $H_2C = CH - C = N$

IT 77-92-9DP, Citric acid, reaction products with cyclodextrins and amino- or hydroxyl-containing fabrics 97-65-4DP, Itaconic acid, reaction products with cyclodextrins and amino- or hydroxyl-containing fabrics 99-14-9DP, 1,2,3-Propanetricarboxylic acid, reaction products with cyclodextrins and amino- or hydroxyl-containing fabrics 110-16-7DP, Maleic acid, reaction products with cyclodextrins and amino- or hydroxyl-containing fabrics 498-23-7DP, Citraconic acid, reaction products with cyclodextrins and amino- or hydroxyl-containing fabrics 499-12-7DP, Aconitic acid, reaction products with cyclodextrins and amino- or hydroxyl-containing fabrics 517-60-2DP, Mellitic acid, reaction products with

cyclodextrins and amino- or hydroxyl-containing fabrics 1703-58-8DP, 1,2,3,4-Butanetetracarboxylic acid, reaction products with cyclodextrins and amino- or hydroxyl-containing fabrics 3786-91-2DP, all-cis-1,2,3,4-Cyclopentanetetracarboxylic acid, reaction products with cyclodextrins and amino- or hydroxyl-containing fabrics 4917-76-4DP, Thiodisuccinic acid, reaction products with cyclodextrins and amino- or hydroxyl-containing fabrics 7408-18-6DP, Oxydisuccinic acid, reaction products with cyclodextrins and amino- or hydroxyl-containing fabrics 7585-39-9DP, β - Cyclodextrin , reaction products with polycarboxylic acids and amino- or hydroxyl-containing fabrics 9003-01-4DP, Poly(acrylic acid), reaction products with cyclodextrins and amino- or hydroxyl-containing fabrics 10016-20-3DP, α -Cyclodextrin, reaction products with polycarboxylic acids and amino- or hydroxyl-containing fabrics 12619-70-4DP, Cyclodextrin, derivs. or inclusion complexes, reaction products with polycarboxylic acids and aminoor hydroxyl-containing fabrics 17465-86-0DP, γ- Cyclodextrin, reaction products with polycarboxylic acids and amino- or hydroxyl-containing fabrics 25087-26-7DP, Poly(methacrylic acid), reaction products with cyclodextrins and amino- or hydroxyl-containing fabrics (in fabric treatment for improved adsorbent properties) 77-92-9 HCAPLUS 1,2,3-Propanetricarboxylic acid, 2-hydroxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c} {\rm CO_2H} \\ | \\ {\rm HO_2C-CH_2-C-CH_2-CO_2H} \\ | \\ {\rm OH} \end{array}$$

RN

CN

RN 97-65-4 HCAPLUS CN Butanedioic acid, methylene- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{HO}_2\text{C}-\text{C}-\text{CH}_2-\text{CO}_2\text{H} \end{array}$$

RN 99-14-9 HCAPLUS

CN 1,2,3-Propanetricarboxylic acid (7CI, 8CI, 9CI) (CA INDEX NAME)

$$^{\mathrm{CO_2H}}_{\mid}$$
 $^{\mathrm{HO_2C-CH_2-CH-CH_2-CO_2H}}$

RN 110-16-7 HCAPLUS

CN 2-Butenedioic acid (2Z) - (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 498-23-7 HCAPLUS

CN 2-Butenedioic acid, 2-methyl-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 499-12-7 HCAPLUS

CN 1-Propene-1,2,3-tricarboxylic acid (8CI, 9CI) (CA INDEX NAME)

RN 517-60-2 HCAPLUS

CN Benzenehexacarboxylic acid (8CI, 9CI) (CA INDEX NAME)

RN 1703-58-8 HCAPLUS CN 1,2,3,4-Butanetetracarboxylic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX

NAME)

$$\begin{array}{c|c} \operatorname{HO_2C} & \operatorname{CO_2H} \\ \mid & \mid \\ \operatorname{HO_2C-CH_2-CH-CH-CH_2-CO_2H} \end{array}$$

RN 3786-91-2 HCAPLUS CN 1,2,3,4-Cyclopentanetetracarboxylic acid, (1R,2R,3S,4S)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

$$CO_2H$$
 S
 R
 R
 CO_2H

RN 4917-76-4 HCAPLUS CN Butanedioic acid, 2,2'-thiobis- (9CI) (CA INDEX NAME)

$$\begin{array}{c} {\rm CO_2H} \\ | \\ {\rm S-CH-CH_2-CO_2H} \\ | \\ {\rm HO_2C-CH-CH_2-CO_2H} \end{array}$$

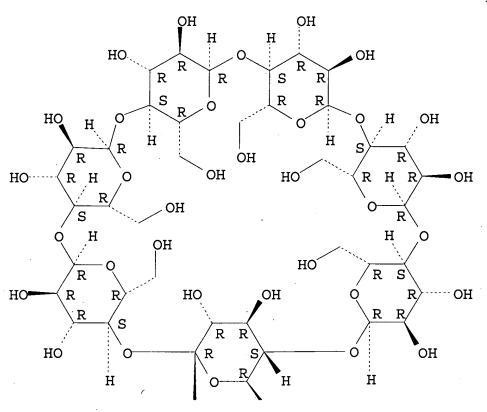
RN 7408-18-6 HCAPLUS CN Butanedioic acid, 2,2'-oxybis- (9CI) (CA INDEX NAME)

$$\begin{array}{c} {\rm CO_2H} \\ | \\ {\rm O-CH-CH_2-CO_2H} \\ | \\ {\rm HO_2C-CH-CH_2-CO_2H} \end{array}$$

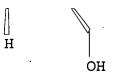
RN 7585-39-9 HCAPLUS CN β -Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



RN 9003-01-4 HCAPLUS

CN 2-Propenoic acid, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7

CMF C3 H4 O2

RN 10016-20-3 HCAPLUS

CN α -Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 12619-70-4 HCAPLUS

CN Cyclodextrin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 17465-86-0 HCAPLUS

CN γ -Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

RN 25087-26-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-C-CO}_2 \text{H} \end{array}$$

IC ICM D06M015-03

ICS D06M013-192; D21H017-24; D21H017-15; D21H017-43; C14C011-00; D06M016-00; D06M015-263

CC 40-9 (**Textiles** and Fibers)

Section cross-reference(s): 5, 43, 44, 45

ST **fabric** treatment **cyclodextrin** carboxylic acid adsorbent

IT Amines, uses

```
(aliphatic, catalysts; in fabric treatment for
         improved adsorbent properties)
 ΙT
      Polyphosphoric acids
         (alkali metal salts, catalysts; in fabric
         treatment for improved adsorbent properties)
 IT
      Alkali metal hydroxides
         (catalysts; in fabric treatment for
         improved adsorbent properties)
 IT
      Textiles
         (cotton; fabric treatment for improved adsorbent
         properties)
 IT
      Fabric finishing
         (fabric treatment for improved adsorbent properties)
 IΤ
      Insect repellents
      Insecticides
         (fabric treatment for improved retention of)
      Polyester fibers, properties
 IT
         (fabrics; fabric treatment for improved
         adsorbent properties)
 IT
      Amidation catalysts
      Esterification catalysts
         (in fabric treatment for improved adsorbent
         properties)
      Carboxylic acids, uses
IT
         (polycarboxylic, reaction products with cyclodextrins
         and amino- or hydroxyl-containing fabrics; in
         fabric treatment for improved adsorbent properties)
·IT
     Leather
        Paper
         (treatment for improved adsorbent properties)
IT
      Textiles
         (wool; fabric treatment for improved adsorbent
         properties)
IT
      7558-80-7D, Sodium dihydrogen phosphate,
     hydrates 7664-41-7, Ammonia, uses
      7681-53-0, Sodium hypophosphite
      10039-32-4, Disodium hydrogen phosphate
      dodecahydrate
         (catalyst; in fabric treatment for improved
         adsorbent properties)
IT
     77-09-8
         (dye; fabric treatment for improved retention of)
IT
     25014-41-9, Polyacrylonitrile
         (fiber; in fabric treatment for improved
         adsorbent properties)
IT
     77-92-9DP, Citric acid, reaction
     products with cyclodextrins and amino- or
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```
hydroxyl-containing fabrics 97-65-4DP, Itaconic
acid, reaction products with cyclodextrins and amino- or
hydroxyl-containing fabrics 99-14-9DP,
1,2,3-Propanetricarboxylic acid, reaction products with
cyclodextrins and amino- or hydroxyl-containing
fabrics 110-16-7DP, Maleic
acid, reaction products with cyclodextrins and
amino- or hydroxyl-containing fabrics 498-23-7DP,
Citraconic acid, reaction products with
cyclodextrins and amino- or hydroxyl-containing
fabrics 499-12-7DP, Aconitic acid, reaction
products with cyclodextrins and amino- or
hydroxyl-containing fabrics 517-60-2DP,
Mellitic acid, reaction products with
cyclodextrins and amino- or hydroxyl-containing
fabrics 1703-58-8DP, 1,2,3,4-
Butanetetracarboxylic acid, reaction products with
cyclodextrins and amino- or hydroxyl-containing
fabrics 3786-91-2DP, all-cis-1,2,3,4-
Cyclopentanetetracarboxylic acid, reaction products with
cyclodextrins and amino- or hydroxyl-containing
fabrics 4917-76-4DP, Thiodisuccinic
acid, reaction products with cyclodextrins and
amino- or hydroxyl-containing fabrics 7408-18-6DP,
Oxydisuccinic acid, reaction products with
cyclodextrins and amino- or hydroxyl-containing
fabrics 7585-39-9DP, \beta- Cyclodextrin
, reaction products with polycarboxylic acids and amino- or
hydroxyl-containing fabrics 9003-01-4DP, Poly(
acrylic acid), reaction products with
cyclodextrins and amino- or hydroxyl-containing
fabrics 10016-20-3DP, \alpha-
Cyclodextrin, reaction products with polycarboxylic acids
and amino- or hydroxyl-containing fabrics
12619-70-4DP, Cyclodextrin, derivs. or inclusion
complexes, reaction products with polycarboxylic acids and amino-
or hydroxyl-containing fabrics 17465-86-0DP,
γ- Cyclodextrin, reaction products with
polycarboxylic acids and amino- or hydroxyl-containing fabrics
25087-26-7DP, Poly(methacrylic acid),
reaction products with cyclodextrins and amino- or
hydroxyl-containing fabrics
   (in fabric treatment for improved adsorbent
   properties)
134-62-3, Diethyltoluamide
   (mosquito repellent; fabric treatment for improved
   retention of)
```

IT

REFERENCE COUNT:

12 THERE ARE 12 CITED REFERENCES AVAILABLE

FOR THIS RECORD. ALL CITATIONS

AVAILABLE

IN THE RE FORMAT

L110 ANSWER 17 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2000:344475 HCAPLUS

DOCUMENT NUMBER:

132:348976

TITLE:

Inclusion compounds of organic peroxides or azo-type polymerization initiators, fiber structures graft polymerized therewith, and

their manufacture

INVENTOR(S):

Hara, Toshinori; Amano, Jiro Toray Industries, Inc., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

1

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT ASSIGNEE(S): }

DATE	PATENT NO.	•	KIND	DATE	APPLICATION NO.
	JP 200014360	0	A2	20000523	JP 1999-254467

1999

0908

PRIORITY APPLN. INFO.:

JP 1998-258062

1998

0911

AB The inclusion compds. with good dispersibility in H2O are prepared

and used in graft polymerization of fiber structures so that byproduct

homopolymer formation can be reduced. Thus, Bz202 was dissolved in **methacrylic acid**, mixed with α -cyclodextrin, and further mixed with H2O to give a dispersion (0.5 g/L Bz202), in which a PET taffeta was immersed and heated to 120° for 30 min to give grafting ratio 9.8%

and homopolymer formation ratio ≤0.1%. IC ICM C07C245-02

```
ICS C07C255-65; C07C407-00; C07C409-32; C08F291-00; D06M014-14
     40-9 (Textiles and Fibers)
CC
ST
     cyclodextrin clathrate benzoyl peroxide water
     dispersibility; methacrylic acid grafting PET
     fabric
IT
     Polyester fibers, uses
     Synthetic polymeric fibers, uses
        (ethylene glycol-methacrylic acid
        -terephthalic acid, graft, fabrics; inclusion compds. of
        polymerization initiators for graft polymerization of fabrics)
IT
     Polymerization catalysts
        (graft; inclusion compds. of polymerization initiators for
graft
        polymerization of fabrics)
     108892-26-8P, Ethylene glycol-methacrylic acid
IT
     -terephthalic acid graft copolymer
                                          122343-64-0P, Ethylene
     glycol-2-hydroxyethyl methacrylate-terephthalic acid graft.
     copolymer
        (fiber, fabrics; inclusion compds. of polymerization
initiators for
        graft polymerization of fabrics)
L110 ANSWER 18 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
                         2001:510669 HCAPLUS
DOCUMENT NUMBER:
                         136:87135
                         Polycondensation reaction between
TITLE:
                         cyclodextrins and polycarboxylic
                         acids: a new approach in polymerization and
                         grafting onto textile fibers
AUTHOR(S):
                         Martel, B.; Morcellet, M.; Ruffin, D.;
                         Weltrowski, M.
CORPORATE SOURCE:
                         Laboratoire de Chimie Organique et
                         Macromoleculaire UPRESA CNRS 8009, Universite
                         des Sciences et Technologies de Lille,
                         Villeneuve d'Ascq, 59655, Fr.
SOURCE:
                         Cyclodextrin: From Basic Research to Market,
                         International Cyclodextrin Symposium, 10th,
                         Ann Arbor, MI, United States, May 21-24, 2000
                         (2000), 512-517. Wacker Biochem Corp.:
                         Adrian, Mich.
                         CODEN: 69BFYD
DOCUMENT TYPE:
                         Conference; (computer optical disk)
LANGUAGE:
                         English
     Polycarboxylic acids as citric acid,
     1,2,3,4-butanetetracarboxylic acid or polyacrylic
     acid have been used as crosslinking agents of
```

cyclodextrins (CDs). In this paper we show that

depending on the reaction conditions and according to the adapted exptl. process, polyesters of CDs or **textiles** carrying CDs could be obtained. CD polymers were water soluble or insol.

and

differed by their resp. d.p. and crosslinking degrees. On the other hand, permanent fixation of CDs onto **textiles** occurred either through reaction of the functional groups of the **fibers** (covalent bonding), either through the formation of a crosslinked polymer as above mentioned that is tangled up in

the

fibers (non covalent bonding). This new approach in the synthesis of cyclodextrin containing materials has the advantage to be easy to carry out and to be environment friend.

IT 7558-80-7, Sodium phosphate (NaH2PO4)

7681-53-0, Sodium hypophosphite (NaH2PO2)

(catalyst; in polymerization and grafting of cyclodextrins onto textile fibers

in presence of polycarboxylic acids as crosslinking agents)
RN 7558-80-7 HCAPLUS
CN Phosphoric acid, monosodium salt (8CI, 9CI) (CA INDEX NAME)

Na

RN 7681-53-0 HCAPLUS CN Phosphinic acid, sodium salt (8CI, 9CI) (CA INDEX NAME)

 $O = PH_2 - OH$

Na

TT 77-92-9, Citric acid, uses
1703-58-8, 1,2,3,4-Butanetetracarboxylic acid
9003-01-4, Acrylic acid homopolymer

(crosslinking agent; in polymerization and grafting of cyclodextrins onto textile fibers

in presence of polycarboxylic acids as crosslinking agents)

RN 77-92-9 HCAPLUS

CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy- (9CI) (CA INDEX NAME)

$$^{\mathrm{CO_2H}}_{\mid}$$
 $^{\mathrm{HO_2C--CH_2-CO_2H}}_{\mid}$ $^{\mathrm{OH}}$

RN 1703-58-8 HCAPLUS

CN 1,2,3,4-Butanetetracarboxylic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX

NAME)

$$\begin{array}{c|c} & \operatorname{HO_2C} & \operatorname{CO_2H} \\ & | & | \\ \operatorname{HO_2C-CH_2-CH-CH-CH_2-CO_2H} \end{array}$$

RN 9003-01-4 HCAPLUS

CN 2-Propenoic acid, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7 CMF C3 H4 O2

IT 7585-39-9, β - Cyclodextrin

10016-20-3, α - Cyclodextrin

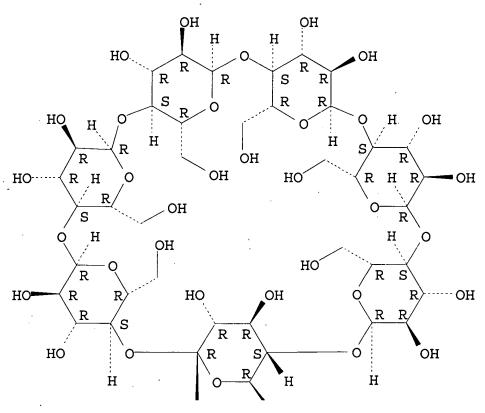
17465-86-0, γ - Cyclodextrin

(in polymerization and grafting of cyclodextrins onto textile fibers in presence of polycarboxylic acids as crosslinking agents)

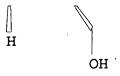
RN 7585-39-9 HCAPLUS

CN β -Cyclodextrin (8CI, 9CI) (CA INDEX NAME) Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



RN 10016-20-3 HCAPLUS CN α -Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 17465-86-0 HCAPLUS CN γ -Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

CC 40-2 (**Textiles** and Fibers)

Section cross-reference(s): 35

ST graft polymn polycarboxylic acid cyclodextrin textile

IT Polyester fibers, processes

Polyesters, processes

(fabrics; in polymerization and grafting of

cyclodextrins onto textile fibers

in presence of polycarboxylic acids as crosslinking agents)

IT Polymerization catalysts

(graft, sodium phosphate and hypophosphite;

in polymerization and grafting of cyclodextrins onto

textile fibers in presence of polycarboxylic

acids as crosslinking agents)

IT Polymerization

(graft; in polymerization and grafting of cyclodextrins onto textile fibers in presence of polycarboxylic

acids as crosslinking agents)

IT Crosslinking agents

Gossypium hirsutum

(in polymerization and grafting of cyclodextrins onto textile fibers in presence of polycarboxylic

acids as crosslinking agents) IT 7558-79-4, Sodium phosphate (Na2HPO4) 7558-80-7 , Sodium phosphate (NaH2PO4) 7681-53-0, Sodium hypophosphite (NaH2PO2) (catalyst; in polymerization and grafting of cyclodextrins onto textile fibers in presence of polycarboxylic acids as crosslinking agents) IT 77-92-9, Citric acid, uses 1703-58-8, 1,2,3,4-Butanetetracarboxylic acid 9003-01-4, Acrylic acid homopolymer (crosslinking agent; in polymerization and grafting of cyclodextrins onto textile fibers in presence of polycarboxylic acids as crosslinking agents) IT 25038-59-9, Poly(Ethylene Terephthalate), processes (fabrics; in polymerization and grafting of cyclodextrins onto textile fibers in presence of polycarboxylic acids as crosslinking agents) IT 7585-39-9, β - Cyclodextrin 10016-20-3, α - Cyclodextrin 17465-86-0, γ - Cyclodextrin (in polymerization and grafting of cyclodextrins onto textile fibers in presence of polycarboxylic acids as crosslinking agents) REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT ANSWER 19 OF 23 TEXTILETECH COPYRIGHT 2005 Inst. of Textile Technology on STN 622547 TEXTILETECH ACCESSION NUMBER: DOCUMENT NUMBER: 199901796 TITLE: Materials-Chirality: The Attempt to Design an Intermolecular Transfer of a Dye Molecule between a Chiral and an Achiral Environment. AUTHOR: Cheon K. S.; van Delden R.; Green M. M. CORPORATE SOURCE: Polytechnic Univ. - Brooklyn Polymer Preprints, 39, No. 2: 711+, 2 pages SOURCE: (Aug. 1998). Reference(s): 14 refs. CODEN: ACPPAY DOCUMENT TYPE: Journal LANGUAGE: English AB Studies of the conformational changes of polymethacrylic acid (PMA) as a function of the degree of ionization revealed that PMA

in dilute aqueous solution resists expansion of the coil at low degrees of ionization, but changes to a more extended

conformation with an increase in pH. The reason that PMA resists expansion at low pH is still not understood. The supramolecular complex between a cyclodextrin and an atropisomeric aromatic group bound as a label to PMA can be reversed as a function of pH. These experiments extend the pH dependent on/off circular dichroism effect monitoring the complex to a complex between a cyclodextrin and azo dyes bound as labels to PMA. Also related to the hydrophobic character of PMA, the solubilization of unbound materials has been studied with a series of aromatic molecules, including optically active (R)-1,1'-binaphthyl.

L110 ANSWER 20 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1997:145273 HCAPLUS

DOCUMENT NUMBER:

126:141392

TITLE:

Cellulases with reduced mobility by

immobilization or gel incorporation for use

in

laundry detergents or fabric

softeners

INVENTOR(S):

Nielsen, Jack Bech; Tikhomirov, Dmitry

Feodorovich

PATENT ASSIGNEE(S):

Novo Nordisk A/S, Den.

SOURCE:

PCT Int. Appl., 77 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent

English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.		
DATE						
	WO 9701629	A1	19970116	WO 1996-DK284		

1996

0626

```
AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE,
    W:
        DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR,
        KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO,
        NZ, PL, PT, RO, RU, SD, SE, SG
    RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR,
        GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
        CM, GA
AU 9662988
                     A1
                           19970130
                                       AU 1996-62988
```

1996

0.626

EP 835302 A1 19980415 EP 1996-921912

1996

0626

R: BE, DE, DK, ES, FR, GB, GR, IT, NL, SE, PT, IE
PRIORITY APPLN. INFO.: DK 1995-750 A

1995

0628

WO 1996-DK284 W

1996

0626

AB A cellulolytic enzyme preparation comprising a cellulase with reduced

mobility is prepared, e.g., by increasing the mol. weight or apparent

size of the cellulase protein mol. or by insolubilizing or immobilizing the cellulase. The cellulase component may be immobilized by incorporation into a gel, by the formation of stable or temporary aggregates with enhanced mol. mass, by rapid immobilization of cellulase protein on insol. components, by rapid

autoimmobilization of the cellulase protein, or by adsorption to an insol. or soluble carrier. The carrier is preferably a cellulose-containing carrier of fibrous, microcryst., or orphous

structure, and more preferably a soluble or insol. polymer, especially a

polysaccharide capable of interaction with the enzyme via a cellulose binding domain (CBD) or catalytic domain, or a soluble polycationic cellulose derivative For example, Humicola insolens

43-kDa cellulase (1.6 g/L) may be autoimmobilized on 100 g/L Avicel (microcryst. cellulose) by incubation in sodium phosphate buffer (0.05M, pH 7.5) at 20° for 30 min, repeated centrifugation at 4000 rpm for 15 min and 5°, freezing the moist sediment, and milling. About 50% of the total

cellulase is autoimmobilized by this procedure, and the immobilized cellulase retains full activity as "free" cellulase. The cellulase preparation has a much lesser effect or influence on the

durability or aging behavior of the cellulosic substrate than corresponding unmodified cellulases while at least having as good an effect on the look or feel, when used for treatment of cellulosic fabrics or textiles. The cellulase preparation may be used for domestic or industrial laundering or fabric softening as an ingredient of a detergent composition, for bio-polishing, or for stone-washing denim fabric or denim jeans or other dyed fabric or garments.

IT 7585-39-9, β- Cyclodextrin 9003-01-4, Polyacrylic acid 10016-20-3,

a Craledoutein

 α - Cyclodextrin

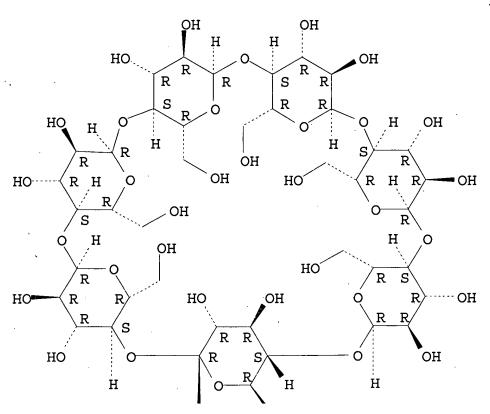
(cellulases with reduced mobility by immobilization or gelincorporation for use in laundry detergents or **fabric** softeners)

RN 7585-39-9 HCAPLUS

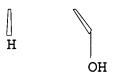
CN β -Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



RN 9003-01-4 HCAPLUS

CN 2-Propenoic acid, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7

CMF C3 H4 O2

RN 10016-20-3 HCAPLUS

CN α -Cyclodextrin (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

IC ICM C12N009-42

ICS C11D003-386; D06M016-00

CC 7-7 (Enzymes)

Section cross-reference(s): 46

IT Charcoal

(activated; cellulases with reduced mobility by immobilization or gel incorporation for use in laundry detergents or **fabric** softeners)

IT Sulfonates

(alkanesulfonates; cellulases with reduced mobility by immobilization or gel incorporation for use in laundry detergents or **fabric** softeners)

IT Sulfates, uses

```
(alkyl; cellulases with reduced mobility by immobilization or
        gel incorporation for use in laundry detergents or
        fabric softeners)
     Sulfonic acids, uses
IT
     Sulfonic acids, uses
        (alkylarene, sodium salts; cellulases with reduced mobility by
        immobilization or gel incorporation for use in laundry
        detergents or fabric softeners)
IT
     Quaternary ammonium compounds, uses
        (alkyltrimethyl, bromides; cellulases with reduced mobility by
        immobilization or gel incorporation for use in laundry
        detergents or fabric softeners)
IT
     Aspergillus
     Bacillus (bacterium genus)
     Bacteria (Eubacteria)
     Detergents
       Fabric softeners
     Fungi
     Fusarium
     Geotrichum
     Humicola
     Humicola insolens
     Microorganism
     Myceliophthora
     Paenibacillus lautus
     Penicillium
     Phanerochaete
     Schizophyllum (fungus)
     Surfactants
        (cellulases with reduced mobility by immobilization or gel
        incorporation for use in laundry detergents or fabric
        softeners)
IT
    Agglutinins and Lectins
    Albumins, uses
    Antibodies
    Bentonite, uses
    Diatomite
    Glutens
    Glycolipids
    Phospholipids, uses
    Polymers, uses
    Polyoxyalkylenes, uses
    Polysaccharides, uses
    Proteins, general, uses
     Zeolites (synthetic), uses
        (cellulases with reduced mobility by immobilization or gel
        incorporation for use in laundry detergents or fabric
```

softeners)

IT Immobilization, biochemical

(enzyme; cellulases with reduced mobility by immobilization or gel incorporation for use in laundry detergents or fabric softeners)

IT Clay minerals

(hectorite-like; cellulases with reduced mobility by immobilization or gel incorporation for use in laundry detergents or **fabric** softeners)

IT Proteins, specific or class

(pea; cellulases with reduced mobility by immobilization or

gel

incorporation for use in laundry detergents or **fabric** softeners)

IT Proteins, specific or class

(potato; cellulases with reduced mobility by immobilization or gel incorporation for use in laundry detergents or **fabric** softeners)

IT Polyamines

(secondary; cellulases with reduced mobility by immobilization or gel incorporation for use in laundry detergents or **fabric** softeners)

IT Proteins, general, uses

(soybean; cellulases with reduced mobility by immobilization

or

gel incorporation for use in laundry detergents or fabric softeners)

IT Glycosides

(steroidal; cellulases with reduced mobility by immobilization or gel incorporation for use in laundry detergents or **fabric** softeners)

IT Proteins, specific or class

(whey; cellulases with reduced mobility by immobilization or gel incorporation for use in laundry detergents or **fabric** softeners)

IT 9004-34-6, Cellulose, uses

(Avicel or Vivicel or Sigmacel; cellulases with reduced mobility by immobilization or gel incorporation for use in laundry detergents or **fabric** softeners)

To 7585-39-9, β- Cyclodextrin 7631-86-9, Silica, uses 9000-01-5, Gum arabic 9000-30-0, Guar gum 9000-36-6, Karaya gum 9000-40-2, Locust bean gum 9000-65-1, Tragacanth gum 9000-69-5, Pectin 9002-18-0, Agar 9002-89-5, Polyvinyl alcohol 9002-98-6, Polyethylenimine 9003-01-4, Polyacrylic acid 9003-05-8, Polyacrylamide 9003-39-8, Polyvinylpyrrolidone 9004-30-2, Carboxymethyl hydroxyethyl cellulose 9004-38-0, Cellulose acetate

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9004-53-9, Dextrin 9004-54-0, Dextran, uses
phthalate
9004-58-4, Ethyl hydroxyethyl cellulose 9004-61-9, Hyaluronic
      9004-62-0, Hydroxyethyl cellulose 9004-65-3, Methyl
hydroxypropyl cellulose 9005-25-8, Starch, uses 9005-38-3,
Sodium alginate
                 9005-53-2, Lignin, uses 9005-80-5, Inulin
9011-85-2, Quince seed gum 9011-87-4, Methylacrylate-
                                                   9012-76-4,
methylmethacrylate copolymer 9012-36-6, Agarose
           9032-42-2, Methyl hydroxyethyl cellulose 9036-66-2,
Arabinogalactan 9041-56-9, Methyl hydroxybutyl cellulose
                            9050-31-1, Hydroxypropyl methyl
9050-30-0, Heparan sulfate
cellulose phthalate
                    9057-02-7, Pullulan
                                           9062-07-1,
\iota-Carrageenan 9064-57-7, \lambda-Carrageenan
10016-20-3, \alpha- Cyclodextrin 11078-31-2,
Glucomannan 11114-20-8, κ-Carrageenan
                                         11128-96-4,
Amberlite LA-2
                11138-66-2, Xanthan gum 25104-18-1, Polylysine
25232-42-2, Polyvinylimidazole
                                25322-68-3
                                             25608-40-6,
Polyaspartic acid 26063-13-8, Polyaspartic acid
                                                   30581-59-0.
Dimethylaminoethyl methacrylate-N-vinylpyrrolidone copolymer
38000-06-5, Polylysine
                        50851-57-5
                                     53320-86-8, Laponite
54724-00-4, Curdlan 71138-97-1, Hydroxypropyl methyl cellulose
acetate succinate
                   84563-76-8, Chitosan glutamate
143928-11-4, Chondroitin tetrakis(hydrogen sulfate) (ester)
185323-66-4, Chondroitin octakis(hydrogen sulfate)
   (cellulases with reduced mobility by immobilization or gel
   incorporation for use in laundry detergents or fabric
   softeners)
9012-54-8, Cellulase
   (cellulases with reduced mobility by immobilization or gel
   incorporation for use in laundry detergents or fabric
   softeners)
25014-15-7, Poly(2-vinylpyridine)
```

IT

ΙT

(quaternary; cellulases with reduced mobility by immobilization

> or gel incorporation for use in laundry detergents or fabric softeners)

L110 ANSWER 21 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1996:653271 HCAPLUS

DOCUMENT NUMBER: 125:303850

TITLE: Laundry article for preventing dye carry-over

and indicator therefor

INVENTOR(S): Johnson, Kaj A.; Van Buskirk, Gregory;

Gillette, Samuel M.

PATENT ASSIGNEE(S): Clorox Company, USA; Precision Fabrics Group,

SOURCE: PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

A1 19960906 WO 1996-US2531 WO 9626831

1996

0222

W: CA, JP, MX

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL,

PT, SE

CA 2209173 AA 19960906 CA 1996-2209173

0222

C 20030603 A1 19971217 EP 1996-907115 CA 2209173 EP 812261

1996

0222

R: DE, ES, FR, GB, IT

JP 11501368 T2 19990202 JP 1996-526355

1996

PRIORITY APPLN. INFO.: US 1995-396853

1995

0301

WO 1996-US2531

1996

0222

AΒ A system for removing extraneous, random free-flowing dyes from laundry washing applications comprises a laundry article that can freely circulate among items being laundered. The laundry article

comprises a dye absorber and a dye transfer inhibitor which are introduced into a wash liquor via a support matrix. The dye absorber maintains a relational association with the support matrix in

the wash liquor, whereas the dye transfer inhibitor is delivered up from the support matrix to the wash liquor and may be evenly distributed through the wash liquor. The laundry article provides

a method for preventing the redeposition of extraneous dyes onto other wash items, while simultaneously providing an indicator system for the manifestation of such scavenging process. A typical laundry article was manufactured by dipping a fabric composed of 54% wood pulp and 46% polyester fibers in a mixture containing Reten 203 (low-to-medium mol. weight, high-charge d.

cationic resin) 100, Polycup 1884 (water-soluble epichlorohydrin-polyamide) 50, and water 250 g, passing the impregnated fabric through 2 nip rollers, and cured 60 s at 300°F.

IT 12619-70-4, Cyclodextrin

(dye-transfer inhibitors; impregnated **fabrics** containing dye absorber and dye transfer inhibitor for preventing redeposition of dyes onto laundered garments with indicator

for

dye scavenging)

RN 12619-70-4 HCAPLUS

CN Cyclodextrin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IC ICM B32B007-00

ICS B32B027-00; D03D003-00; D03D015-00

CC 46-5 (Surface Active Agents and Detergents)

ST dye redeposition prevention system laundering; epichlorohydrin polyamide impregnated fabric; cationic resin impregnated fabric; pulp fabric impregnated dye redeposition preventer; polyester fabric impregnated dye redeposition preventer; fabric impregnated dye redeposition prevention system

IT Amphoteric substances

(dye absorbers; impregnated **fabrics** containing dye absorber and dye transfer inhibitor for preventing redeposition

of dyes onto laundered garments with indicator for dye scavenging)

IT Proteins, uses

Quaternary ammonium compounds, uses

(dye absorbers; impregnated **fabrics** containing dye absorber and dye transfer inhibitor for preventing redeposition

of dyes onto laundered garments with indicator for dye scavenging)

IT Gums and Mucilages

Oxidizing agents

(dye-transfer inhibitors; impregnated **fabrics** containing dye absorber and dye transfer inhibitor for preventing redeposition of dyes onto laundered garments with indicator

for

dye scavenging)

IT Enzymes

Peptides, uses

Polyamides, uses

Polyamines

(dye-transfer inhibitors; impregnated **fabrics** containing dye absorber and dye transfer inhibitor for preventing redeposition of dyes onto laundered garments with indicator

for

dye scavenging)

IT Pulp, cellulose

(fabrics containing polyester fibers and pulp fibers; impregnated fabrics containing dye absorber and dye transfer inhibitor for preventing redeposition

of dyes onto laundered garments with indicator for dye scavenging)

IT Dyes

(impregnated **fabrics** containing dye absorber and dye transfer inhibitor for preventing redeposition of dyes onto laundered garments with indicator for dye scavenging)

IT Polyester fibers, uses

(impregnated **fabrics** containing dye absorber and dye transfer inhibitor for preventing redeposition of dyes onto laundered garments with indicator for dye scavenging)

IT Surfactants

(amphoteric, dye-transfer inhibitors; impregnated fabrics containing dye absorber and dye transfer inhibitor for preventing redeposition of dyes onto laundered garments with indicator for dye scavenging)

IT Surfactants

(cationic, dye-transfer inhibitors; impregnated fabrics containing dye absorber and dye transfer inhibitor for preventing redeposition of dyes onto laundered garments

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with indicator for dye scavenging)
 IT
      Polyamides, uses
         (poly(amino acids), dye-transfer inhibitors; impregnated
         fabrics containing dye absorber and dye transfer inhibitor
         for preventing redeposition of dyes onto laundered garments
         with indicator for dye scavenging)
 IT
      Carboxylic acids, uses
         (polymers, impregnated fabrics containing dye absorber
         and dye transfer inhibitor for preventing redeposition of dyes
         onto laundered garments with indicator for dye scavenging)
 IT
      Polyamides, uses
         (reaction products, with epichlorohydrin, dye absorbers;
         impregnated fabrics containing dye absorber and dye
         transfer inhibitor for preventing redeposition of dyes onto
         laundered garments with indicator for dye scavenging)
 IT
      120-93-4D, Imidazolidinone, derivs.
         (cationic polymers crosslinked by, dye absorbers;
         impregnated fabrics containing dye absorber and dye
         transfer inhibitor for preventing redeposition of dyes onto
         laundered garments with indicator for dye scavenging)
 IT
      67-48-1, Choline chloride 1398-61-4, Chitin
                                                      3327-22-8, QUAB
            9002-98-6
                        9003-11-6, Ethylene oxide-propylene oxide
                  26336-38-9, Poly(vinylamine)
      copolymer
                                                 73071-59-7,
      Polycup 172
                    129807-53-0, Polycup 1884
                                                182630-98-4
      182971-62-6
                    182971-63-7
                                  182971-66-0
                                                182971-67-1
      182971-68-2
                    182971-69-3
                                  182971-69-3
                                                183074-46-6
         (dye absorber; impregnated fabrics containing dye
         absorber and dye transfer inhibitor for preventing
 redeposition
         of dyes onto laundered garments with indicator for dye
         scavenging)
     106-89-8D, Epichlorohydrin, reaction products with polyamides
·IT
         (dye absorbers; impregnated fabrics containing dye
         absorber and dye transfer inhibitor for preventing
 redeposition
         of dyes onto laundered garments with indicator for dye
         scavenging)
      9000-30-0, Guar gum
 IT
                            9003-39-8, PVP K-30
                                                  9004-67-5, Methyl
                  9005-32-7, Alginic acid
                                            11137-98-7, Magnesium
      cellulose
      aluminate
                  12304-65-3, Hydrotalcite
                                             25232-42-2,
      Poly(vinylimidazole)
                            182482-80-0
         (dye-transfer inhibitor; impregnated fabrics containing
         dye absorber and dye transfer inhibitor for preventing
         redeposition of dyes onto laundered garments with indicator
 for
         dye scavenging)
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IT

12619-70-4, Cyclodextrin

(dye-transfer inhibitors; impregnated **fabrics** containing dye absorber and dye transfer inhibitor for preventing redeposition of dyes onto laundered garments with indicator

for

dye scavenging)

IT 79-10-7D, **Acrylic acid**, esters, polymers 9012-76-4, Chitosan

(impregnated **fabrics** containing dye absorber and dye transfer inhibitor for preventing redeposition of dyes onto laundered garments with indicator for dye scavenging)

L110 ANSWER 22 OF 23

WPIX COPYRIGHT 2005 THE THOMSON CORP on STN

ACCESSION NUMBER:

1995-397101 [51] WPIX

DOC. NO. CPI:

C1995-170161

TITLE:

Aromatic mono- or di carboxylic

acid preparation - from naphthalene or

bis-phenyl

cpd., carbon tetra halide, cyclodextrin

and alkali metal hydroxide.

DERWENT CLASS:

A41 B05 C03 E14 F01 L03

PATENT ASSIGNEE(S):

(HIRA-I) HIRAI H

COUNTRY COUNT:

1

PATENT INFORMATION:

PATENT NO	KI	ND	DATE	:	WEEK	ζ	LΑ	I	?G
					. – – – -				-
JP 07267893	Α	19	99510	17 ((19955	51)*		10	

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
JP 07267893	A	· · · · · · · · · · · · · · · · · · ·	JP 1995-41418	19950207

PRIORITY APPLN. INFO: JP 1994-35227

19940209

AN 1995-397101 [51] WPIX

AB JP 07267893 A UPAB: 19951221

Introduction of one or two carboxylic gp(s)., into aromatic rings comprises reaction of naphthalene, biphenyl bis-phenyl cpds. of formulae (I) or (II) with carbon on tetrahalide in the presence

of

a cyclodextrin (CD) and alkali metal hydroxide. R1,R2 = alkyl, in any possible positions on the two rings; m, n = 0-2,

and

m+n=0-2; X = direct bond, -CH2-, -C(CH3)2-, -CH=CH- or -(C=0)-. The reaction is carried out in a solvent in the presence of

metallic copper or copper cpds. as catalyst. The alkali metal hydroxide is dissolved in the reaction solvent give a 1-60 weight% solution. The CD is alpha-, beta-, or alpha-CD, a modified CD or

a fixed CD.

USE - Aromatic dicarboxylic acids and their derivs. are starting materials for high performance polyester-based films, resins and **fibres**, for liquid crystals, agrochemicals, drugs and dyes. Aromatic monocarboxylic acids are starting materials for polyimide or phenol-based resins and films, after converting carboxylic gps. into hydroxyl gps..

Dwq.0/0

L110 ANSWER 23 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1990:236880 HCAPLUS

DOCUMENT NUMBER:

112:236880

TITLE:

Starch binder composition for fiber

mats

INVENTOR(S):

Dragner, L. Robert; Floyd, William C.;

Karnes,

Seymour G.; Deacon, Kim; Wood, Charles;

Walters, J. Douglas

PATENT ASSIGNEE(S):

Sequa Chemicals, Inc., USA

SOURCE:

Eur. Pat. Appl., 8 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

DATE	PATENT NO.	KIND	DATE	APPLICATION NO.
DATE				
	EP 354023	A2	19900207	EP 1989-307872

1989

0802

EP 354023 A3 19900801

R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE JP 02099655 A2 19900411 JP 1989-199166

1989

0731

PRIORITY APPLN. INFO.:

US 1988-227776

Δ

1988

0803

AB Binders giving fiber mats with decreased stretching, shrinkage, and wicking contain starch, crosslinking agents, and antiwicking agents. A polyester fiber mat was impregnated with 22% (based on solids) 15% dispersion of a mixture

of maltodextrin (mol. weight 3600) 100, crosslinking agent (cyclic

urea-glyoxal condensate plus 13% acrylamide-methacrylic acid copolymer) 10, and antiwicking agent (stearylated melamine resin) 0.25 parts, dried, and cured at 204° for 3.5 min to give a mat with 180° stretch 1.9 and 5.3% at 5 and 8 kg load, resp., and wicking 4 mm; vs. 1.5, 4.2, and 35, resp., without the antiwicking agent, and 4.1, 11.0, and 10, resp., for an acrylic polymer emulsion binder.

IT 12619-70-4, Cyclodextrin

(binders, for nonwoven **fiber** mats resistant to stretching, shrinkage and wicking)

RN 12619-70-4 HCAPLUS

CN Cyclodextrin (9CI) (CA INDEX NAME)

- *** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
- IC ICM D04H001-64
- CC 40-10 (Textiles and Fibers)
 Section cross-reference(s): 44
- ST starch binder fabric nonwoven; polyester fabric nonwoven binder; maltodextrin binder fabric nonwoven; antiwicking agent binder fabric; melamine resin antiwicking agent; crosslinking agent starch binder

IT Mats

(polyester fiber, starch binders for, resistant to stretching, shrinkage and wicking)

IT Polyester **fibers**, uses and miscellaneous (starch binders for nonwoven **fabrics** from, with resistance to stretching, shrinkage and wicking)

IT Binding materials

(starch, for nonwoven **fabrics**, resistant to stretching, shrinkage and wicking)

IT Crosslinking agents

(urea-glyoxal condensates and aminoplasts, for starch binders for nonwoven **fabrics**)

IT Textiles

(nonwoven, starch binders for, resistant to stretching,

shrinkage and wicking)

- IT 9003-08-1D, Formaldehyde-melamine copolymer, stearylated (antiwicking agents, for starch binders for nonwoven fabrics)
- IT 9002-89-5 9005-25-8, Starch, uses and miscellaneous 9005-25-8D, Starch, oxidized, ethoxylated 9050-36-6, Maltodextrin 12619-70-4, Cyclodextrin (binders, for nonwoven fiber mats resistant to

(binders, for nonwoven **fiber** mats resistant to stretching, shrinkage and wicking)

IT 57-13-6D, Urea, reaction products with glyoxal 107-22-2 Glyoxal

107-22-2D, Glyoxal, reaction products with urea 9003-05-8D, Polyacrylamide, cationic derivs. 9003-08-1, Formaldehyde-melamine copolymer 9011-05-6, Formaldehyde-urea copolymer 22829-17-0, Ammonium zirconium carbonate 25085-03-4, Acrylamide-methacrylic acid copolymer 25619-09-4, Acetone-formaldehyde copolymer

(crosslinking agents, for starch binders for nonwoven fabrics)